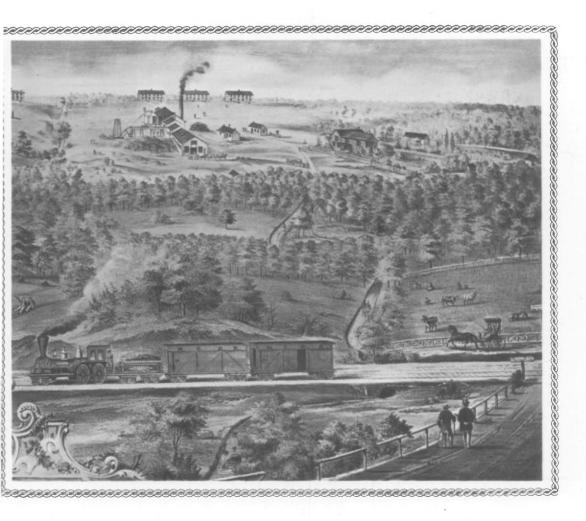
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Maryland Historical Magazine



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MARYLAND HISTORICAL MAGAZINE

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L 101 THE BARE HILL COPPER MINE, BALTO. COUNTY, MD DRAWN AND PRINTED IN COLORS BY SCHMIDT & TROWE 82 BALTO. ST Inset of mine cross section in lower left corner.

* * Lithograph, printed in colors. 52.8x85.8 cm. MdHi.

The picture of Bare Hill Copper Mine reproduced here was drawn and printed in colors by Schmidt & Trowe. The view was taken where Falls Road crosses the Northern Central Railway (now Penn-Central) about one-half mile south of the mine site near Pimlico and Falls roads. Copper was first discovered at Bare Hills about 1839, but the ore was not mined on a large scale until 1864. Ore was shipped to the Baltimore Copper Works in the city for smelting. The inset in the lower left shows the layout of the tunnels and the depth at which the miners worked. This advertisement was published about 1870, several years before the company was succeeded by the Mt. Vernon Mining Company. Schmidt & Trowe are listed as lithographers in the Baltimore directories from 1864 to 1884.

Pearre, "Mining for Copper," pp. 28, 33.

Mendes Cohen: Engineer, Scholar and Railroad Executive

HUGH R. GIBB

MENDES COHEN WOULD HAVE APPROVED OF THE ULTIMATE USE OF THIS building. I like to think he was with us in spirit, if not in person, on 2 July 1953, when a former passenger car shop ceased to be a mere link with the past and became the shape of things to come in railroad museums. It is not likely that he ever set foot in this area. He was not a "rolling stock person" and the structure was opened a decade after he had severed connection with the Baltimore & Ohio. He must, however, have become well acquainted with the Mount Clare Station portion of this complex during the years 1851 to 1855.

When Mendes arrived on the Baltimore scene, 4 May 1851, there was less than 40 miles of railroad operating in the United States. Three small coal lines in Schuylkill County, Pennsylvania, accounted for 25 of them, while the B & O track from Baltimore to Ellicott City constituted the remaining 15 miles. It would be a good year for construction ending with 129 miles in service. Two months to the day following Mendes birth date Baltimore would get its second carrier, the first seven miles of the Northern Central Railroad. A participant in the second generation of American railroading, he grew up with the first.

It was no mere accident that took our hero into railroading. He was the oldest son of David Cohen, originally from Richmond, Virginia, and Harriet Ramah Cohen, a native of Swansea, Wales. The father was a partner in the firm of J. I. Cohen Jr. & Bros., Baltimore bankers. The senior partner, J. I. Cohen, was successively President of the Baltimore & Port Deposit Railroad and the Philadelphia, Wilmington & Baltimore Railroad. Another uncle, Col. Mendes Cohen, after whom he was named, became a director of the B & O.3 Indications are that family influence did play a part in directing young Mendes toward the profession of railroad engineering.

Mendes' education was in the hands of private tutors until his father's death in 1847. This event made it necessary for him to undertake a serious career so at the age of 16 he became an apprentice to Ross Winans in the latter's locomotive shop. Four years training turned him into a machinist, a competent draftsman, and one who understood locomotive construction, a sort of combination civil and mechanical engineer. This competence plus a recognition of his good connections secured him the position of an assistant engineer on the B & O when only twenty years of age.

Mr. Gibb is Acquisitions Librarian at the Eleutherian Historical Library.

In 1851 the railroad was pushing westward from Cumberland to Wheeling. That 200 mile stretch had 12 tunnels of which two would be sufficiently troublesome to delay the completion of the line. At Kingwood, 83 miles, and Broad Tree, 163 miles from Wheeling there were bores of 4100 and 2350 feet respectively that were not being built as rapidly as the rest of the line. It was necessary to keep rail traffic moving past these points if only to deliver rail and other heavy supplies on site. Here was Mendes first engineering assignment and he solved it by a switchback system that eschewed all such artificial aids as cables, racks, and cogs. He relied entirely upon adhesion.

Winans' powerful 0-8-0 "Camels" were to be the motive power and the temporary trackage was predicated upon their use. Benjamin Latrobe, the Chief Engineer, was willing to risk 10 per cent grades, in other words an inclination of over 500 feet to the mile. The "Y" type of switchback was used with one locomotive restricted to a one car load of twelve tons. It worked and although there were instances of movements sliding down grade with locked brakes, there is no record of a fatal accident. Because the Kingwood Tunnel was finished before the public opening of the line to Wheeling, 12 January 1853, neither Latrobe nor Cohen makes detailed mention of it in their reports. At this point in time we do not know how many switchbacks were involved. Broad Tree was another matter. It continued to be a nuisance until April 1853. There were two switches on the east side of the hill and five on the west side. The maximum grade being only six percent it was possible to have two car loads for each engine. On the steeper ascents the locomotive running in a forward direction pushed the cars ahead of it. There were two reasons for this. In the pre-airbrake days it was obviously the only reasonably safe practice. Cohen notes another factor, however, that would escape all but the locomotive buff. The "Camels" had long fireboxes and moving in this direction were less liable to lose water than when running upgrade with the firebox in advance.4

In constructing the "Y" it was Cohen's policy to make the stem of the Y level even if it were necessary to build a trestle to assure sufficient length. The train would come to a dead stop, make sure the switch was properly thrown and then reverse with extreme caution. Nineteenth-century practice was to build the stem on an ascending grade so as to take advantage of gravity on the reversal. Mendes considered this hazardous and where it was necessary to do exactly that, on two of the switches, safety was the paramount consideration. Again the record was excellent only marred by some employees with a hand car who permitted it to get out of control.⁵

With the Wheeling line completed his talents as a mechanical engineer were more in demand and he was accordingly transferred to the Motive Power Department at that moment concerned with converting wood burning locomotives to coal. According to one biographical account he presented a most complete report on that subject, 29 August 1854. I have been unable to locate a copy of this but there is a broadside printed over the authorization of John H. Done, Master of Transportation, 21 September 1855, detailing experiments made on the Washington Branch, with passenger trains, to test the practica-

bility of using semi-bituminous or Cumberland coal in "locomotive engines of the ordinary form." It is noted that experiments were made under the immediate direction of Mendes Cohen, acting by authority of the Transportation Office. Mendes was loyal to his mentor. For the tests he selected No. 32 Atalanta, a Winans' 4-4-0 built in 1843. For three weeks during June and July it hauled scheduled passenger trains between Baltimore and Washington using wood and four different kinds of coal. We have no cost figures for comparison but the most efficient coal had an evaporation rate three times better than wood. That is conclusive enough.

Mechanical devices also came under his purview. There is a report, in handwriting, from Cohen to Samuel J. Hayes, Master of Machinery, dated September 1854. This is entitled "Report on the economy of a new system of working the engines on the Baltimore & Ohio Railroad." Hayes was concerned with mounting fuel costs and had directed Mendes to look into the matter. The latter soon discovered that firemen, lacking steam pressure gauges, had no indication of how efficiently they were firing. As long as the safety valves, set at 90 pounds per square inch, did not pop off and the train kept moving on schedule they had little concern for the continuous boiler pressure. Fluctuations of 50 pounds within a few minutes eventually caused expensive damage to the flues. The problem was solved by the installation of gauges and by raising the safety valve pressure to 110 pounds. A test conducted a year later upon 150 first class engines resulted in increased efficiency of 82 per cent with wood and 32 per cent with coal. The savings in hard cash was over \$95,000.

Knowledge of what Mendes was doing spread beyond the confines of the Baltimore & Ohio. When Robert Hales resigned as Assistant Superintendent of the Hudson River Railroad, 10 October 1855, Mendes was offered and acas locomotive fuel and during his tenure of office Cohen was involved with more of the same type of testing. In addition he was responsible for the daily operations of a new and aggressive railroad battling to take patronage away from the entrenched Hudson River steamboat monopoly.⁹

In spite of his other duties Mendes found time to become involved in the famous Ross Winans-Henry Tyson controversy on the Baltimore & Ohio. The latter as Master of Machinery on the railroad was endeavoring to modernize his locomotive stock and the first victims were to be Winans' 0-8-0 "Camels." Powerful they were but slow was an understatement. In addition they had a rigid wheelbase with no leading truck, hardly suitable for the short radius curves on the new western extension. Tyson wished to replace them with 4-6-0 locomotives of a more modern type. The battle of pamphlets was acrimonious and publicly unpleasant. It only succeeded in destroying the usefulness of both men and in closing forever the famous Winans Works. 10

Under date of 30 April 1857, Mendes wrote to his friend asserting that in his opinion the complaints about the "Camels" were unfounded and that they would hold the track as well as a truck engine. He alluded to their mishandling by firemen and referred to the September 1854 Report to Hayes previously

cited. Reading between the lines one can see that Mendes was not really taking sides but merely lending encouragement. Nothing was said against Tyson's ten-wheelers.¹¹

Mendes Cohen did not have to seek employment, it sought him. The outbreak of war in April 1861 resulted in a vacancy in the Superintendency of the Western Section of the Ohio & Mississippi Railroad. This carrier, later to be the B & O main line from Cincinnati to St. Louis was operating as two sections, dividing at Vincennes, Indiana. The former superintendent had left for a broader stage. He was George Brinton McClellan. Mendes succeeded at once. Early in 1862 he was elected President retaining his position as Superintendent. During this period he was ably seconded by a Chief Engineer only one year his junior. This young man was also to become well known in railroad circles and even more so in early aviation, Octave Chanute. Cohen and Chanute had their hands full with 150 miles of questionable road. It was the short line to the Mississippi Valley and carried almost all troop train and supply traffic to the Western Theatre of the War.

We can notice a pattern evolving in Mendes Cohen's career. He was always available as a trouble-shooter. Each time he changed positions he was called upon to solve short range problems. Once cleared up it would almost seem that he became restive under ordinary day to day operations and eagerly awaited the next problem. The Reading & Columbia Railroad had completed its main line from Columbia to a connection with the Philadelphia & Reading at Sinking Spring, Pennsylvania, 11 January 1864. Its first superintendent, Robert Crane, not really an operating man, was having difficulty with the Reading over the physical track connection. He was also facing the construction of an important branch into Lancaster. The call went out to Mendes and he was elected Superintendent at the board meeting, 7 June 1865, but only for the balance of the year. The committee that had been negotiating with the Reading placed the various problems in his hands and promptly dissolved.¹³

It is impossible to tell how long Mendes remained with the Reading & Columbia. There were no recorded board meetings between 8 January 1866 and 2 June 1869, and consequently no minutes. Both the Reading connection and the Lancaster Branch were finished in 1866 so we may conclude that he left the company some time that year. This same three year gap occurs in Mendes recorded life. Obituary accounts, written in 1915, refer to a year's absence in Europe. There is nothing in the available family papers that indicates when and where he went. It is possible that he just wanted to take a well earned rest. Still a young man, only 35 years of age, he had been working for 15 years at increasingly more difficult and responsible tasks. He had never taken "The Grand Tour" that was the prerogative of his social class in the mid-nineteenth century. Mendes had an inquisitive mind so it would be a chance to observe what progress was being made in European engineering.

We do know that he became a member of the American Society of Civil Engineers, 4 December 1867. The Society, founded in 1852, had been inactive during the Civil War, but was kept alive by a small group. It was resuscitated in 1867, with a total of 26 members. Mendes was always an active participant

and, considering his residence was in Baltimore, he managed to attend a surprisingly large number of New York City meetings and distant conventions. He was elected a Director in 1888, Vice President in 1890, and President for the year 1892–1893. In the Society's memoir of deceased members he is credited with "a well-informed judgment that was at once of value in the building up and judicious expansion of the Society." ¹¹⁴

On 1 July 1868 Mendes Cohen tried his hand at something new. He joined the Lehigh Coal & Navigation Company for the express purpose of overhauling a cumbersome and obsolescent accounting system. The accounts were placed under his charge that same month and he began his project at Mauch Chunk, Pennsylvania, the operating headquarters. By 1 January 1869 progress had been made to the point where the accounting department employees could be transferred to 122 South Second Street, Philadelphia, the corporate headquarters. It was a wise move for various reasons not least of which was the fire of 22 December 1869 which totally destroyed the Mauch Chunk offices. In his report for that year, as President's Assistant and Controller, a position to which the Board had confirmed him on 4 May 1869, Mendes suggested that a suitably fireproof building be erected at Mauch Chunk, noting that the previous rental of the Mansion House Hotel would nearly pay the interest on the cost of a proper office building.¹⁵

In less than a year's time Cohen had created a new accounting system which permitted a smaller clerical force, yet provided for the first time for proper checks and close accountability in all departments. Projecting backwards, it also became possible to secure accounting information from the earlier records that had been truly "closed books." As always Mendes gives credit to those persons who assisted him, the treasurer, the cashier, and the auditor. One wonders why these presumably trained accountants required outside aid. Mendes Cohen had displayed another talent. Today it would be called systems management.

This was not enough. We find him issuing the Report of the Railroad Department for 1869, a task that formerly devolved upon the Superintendent. Finally, the balance sheet and the profit and loss statement for 1869 was countersigned by him instead of the Treasurer as heretofore.

His position was reconfirmed on 3 May 1870 and again on 2 May 1871. The same reports for 1870 bore his imprimature. One suspects that he was also Acting Superintendent in addition to other official duties. On 1 April 1872 the Lehigh Coal & Navigation Company leased its railroad operations to the Central Railroad of New Jersey retaining only the canal and coal mines. Mendes did not go with the Central.

Events now came full circle. Mendes Cohen had commenced his railroad career with the Baltimore & Ohio. He would end it in the same corporation. When the B & O main line reached Cumberland 5 November 1842 it was still not decided whether to proceed to Wheeling or Pittsburgh. If the latter were intended there existed a dormant charter for the Pittsburgh & Connellsville Rail Road dating from 3 April 1837. Through B & O influence this right was extended from Connellsville to the Maryland-Pennsylvania line within six

miles of Cumberland, 18 April 1843. This move struck terror into the Philadelphia business community and signalled a four year battle between that city and Baltimore, fought mainly in the legislature at Harrisburg. The result was a draw. The B & O secured the right to extend to Pittsburgh, on 21 April 1846, but the Pennsylvania Railroad was created 25 February 1847. If the latter had 30 miles of road under contract by 30 July 1847 all B & O rights would be null and void. In addition the Pittsburgh & Connellsville people demanded that the B & O assume all costs from Cumberland to Pittsburgh. The Pennsy fulfilled its contract. This was the last straw. In disgust the B & O turned its back on Pittsburgh and concentrated on Wheeling.

A better climate prevailed after the Civil War and with John W. Garrett's decision to finally invade the Pittsburgh area work was resumed under Benjamin Latrobe's direction. The golden spike was driven at Ford Bridge, about five miles east of Confluence, Pennsylvania, 10 April 1871. The P & C was independent only in name. Operating headquarters were at Pittsburgh but orders came from William Keyser, the B & O Second Vice President at Baltimore. President William Oden Hughart was not managing things in a matter suitable to Baltimore and accordingly his resignation was forced on 4 January 1872. Keyser suceeded him 19 May 1872 but the latter could not be in two places at once. Accordingly Garrett looked about for a "safe" man and once more Mendes was available. He was installed 22 January 1873 and immediately found himself engaged in a full scale war with George Roberts of the Pennsylvania Railroad. 17

Connellsville coke had become recognized as the best available fuel for steel making, a fact which induced the Philadelphia road to invade Fayette County. Building southwest from Greensburg under the name of the Southwest Pennsylvania Railway it would reach Connellsville, on 1 April 1873. This involved a crossing of the P & C's Mount Pleasant Branch at Fountain Hill. Orders came from Baltimore to hold the fort. It was one thing to issue instructions, another to implement them. As usual in confrontations between the Pennsy and the B & O the former was the better tactician. A telegram from Cohen to Garrett, dated 10:05 A.M., 9 March 1873 makes this all too apparent.

Learning that PRR contemplated cutting our branch again last night had a force there with engine reaching the point myself at daybreak this A.M. I find that with an overwhelming force they have succeeded in doing so despite the resistance of our men and are now engaged in putting in switch and connecting siding. The switch was removed by us over a week ago. I have got these men to suspend work temporarily to prevent any violence. I have sent following to George B. Roberts, President.

"I am at your crossing of our branch and am prepared to resist any further interference with our track as a resort to force contemplated by you. If you have rights here surely we can agree upon the matter amicably by conference. I can not, however, consent to the control of this road and work being assumed by you in this way and will resist it. Suppose you order a truce and restoration of our road until conference can be had."

This was sent about 7 A.M. Now half past seven learn their solicitor Mr. Fulton will be here at 10 and am sorry that we have no able man on the spot

and Mr. Kane is in Phila. Will do the best I can but if they attempt to use physical force we will be over-powered I fear. Have you any instructions to give?¹⁸

As if this was not enough Mendes had to take on, at the same time, A. O. Tinstman. He was the President of the Mount Pleasant & Broad Ford Railroad, which after its lease to the P & C, 2 January 1871, became the latter's Mount Pleasant Branch. Tinstman was an implacable enemy of Baltimore. Late in 1874 he would take the P & C to court for non-performance of contract but in the meantime he would be just plain obnoxious, as evidenced by another telegram from Mendes to Garrett, 2:07 P.M., 8 April 1873.

My letter to you will not reach Baltimore until tonight. Closed too late for last night mail. The party you enquire about was not present. Division Superintendent Pitcairn (PRR) was at Bradford but had no men with him and was a spectator whilst Tinstman with men from coke works tore up track. Whilst this was being done below about one hundred PRR men were engaged in making connection at Fountain Mills and as soon as completed they ran down to Bradford with several engines. There was no indication of any of the force being armed. Our accounts with them are in our view of the lease and in that of our lawyers substantially correct. We are moving steadily and surely in the matter and as at present advised must succeed. 19

In the end neither Mendes nor the powers of Baltimore were able to prevent the Pennsylvania from reaching all the way to Uniontown and Fairchance.

During the course of the next two years Mendes Cohen became increasingly disenchanted with his position. As the B & O furthered its plans for an outright lease of the P & C local autonomy gradually disappeared. The takeover became effective 1 November 1875 but Mendes had resigned two months previously. Financial statements which he had furnished in connection with the lease arrangements were altered, presumably by Baltimore, before being presented to the P & C stockholders. This violated Cohen's ethical standards. There could be no compromise. He remained a director of the P & C but even this connection was severed in a few years. At the age of forty-four Mendes turned his back on gainful employment. The rest of his life would be devoted to cultural and philanthropic pursuits, another forty years.

Now living permanently at 825 North Charles Street he was more available than ever before. If it were necessary to form a commission to investigate a Baltimore City problem one turned to Mendes. In 1894 the matter of the street car fender was a cause célèbre in major American cities. In the days of horse traction there were relatively few fatal accidents. The cars moved too slowly and besides that one respected those iron shod hooves by keeping a respectful distance away. People were walking in front of those new, fast electric trolleys and the results were assuming catastrophic proportions. With the approval of the City Council, Mayor Ferdinand C. Latrobe appointed Mendes head of a commission to examine the various safety fenders then obtainable. The first meeting was 9 May. ²¹ By August 30 the report was ready and the findings were published in a 20-page pamphlet entitled "Report on Car

Fenders Suitable for Use on Street Railways." It was thorough. The Commission covered the entire field and refused to endorse any one product, noting that the type of the car's trucks, the speed of the vehicle, and the condition of the paving were all variable factors. Mendes did advocate the combination of a fender on the car dashboard and wheel guards on the front trucks. These guards were formidable looking things and became a hallmark of Baltimore street cars until 1914. In that year the City Engineer Phillips reported to the Public Service Commission that the guards themselves were deadly and they were duly removed.

During that same year President Cleveland appointed the Casey Commission to study the possibility of turning the near bankrupt and obsolescent Chesapeake & Delaware Canal into a sea level ship canal. General Casey represented the Corps of Engineers, the soon to be famous George Dewey the Navy, and Colonel William Craighill the Army. The two civilian members were Edward P. Alexander, ex-Confederate general and railway official, and Mendes Cohen. Seven routes were examined and the final decision was to improve the existing waterway on what was known as the Back Creek route. Mendes concurred in this practical but unpopular decision. The Baltimore business community was set on building a new canal cutting through 70 miles of the Eastern Shore, directly southeastward from its harbor.²³

Incredible as it may seem today Baltimore did not have a sanitary sewerage system until the twentieth century. When Mendes became a member of the Baltimore Sewerage Commission in 1893, cesspools were the order of things and their emptying was a constant affront to the noses of the citizenry, especially in the summer time. Mendes secured the services of Rudolph Herring and Samuel Gray, the two most important names in sanitary engineering. There was no question about the sewer network itself, the problem was one of treatment and discharge and the Commission found itself in the middle.

Disposal by dilution and continuous discharge into the Chesapeake Bay was the cheapest answer and the one favored by Mayor and Council. The oyster industry took a dim view of this. 24 The experts recommended filtration but this would cost at least three times as much. Mayor Hanes was opposed to a municipal bond issue and endeavored to compromise with a scheme for giant septic tanks just ahead of the outfall. The fortuitous sale of the city's interest in the Western Maryland Railway, for over \$4 million, provided the financial impetus. With his goal in sight Mendes resigned from the Commission in 1904. The actual work started the following year in the wake of the great Baltimore fire. Mendes did not live to see the completion in 1916. 25

Culturally Mendes spread his net widely. From 1897 until his death he was Vice President of the American Jewish Historical Society, an organization that he helped to found. From 1893 onward he was a member of the Municipal Art Commission and for many years was on the Board of Trustees of the Peabody Institute. His closest involvement, however, was with the Maryland Historical Society serving as its Corresponding Secretary from 1882 to 1904 and as President from 1904 to 1913. While Secretary he was involved in securing for the Society the Calvert Family papers then in the possession of a grandson

of the last Lord Baltimore. When the papers were formally presented on 10 December 1888, Albert Ritchie stated that,

More than to anyone else we are indebted for the possession of these papers to the intelligent and persistent efforts of Mr. Cohen. He will not, in his account of them, say thus for himself and I therefore say it because it ought to be said by some one.

Cohen and T. Harrison Garrett defrayed most of the expenses of this project. With advancing years Mendes found that summers on Charles Street in those pre-air conditioned days were becoming just a bit too much and accordingly he would rent a summer home in salubrious Roland Park. It was there that he died, at 106 Ridgewood Street, the home of Professor Daniel M. Robinson, on 13 August 1915. The services were conducted in the Madison Avenue Temple and burial was in the Hebrew Cemetary on West Saratoga Street. Let us close with a tribute from that great scholar Cyrus Adler which most aptly expresses the fullness of Mendes Cohen's life.

No man in Baltimore was better known nor more profoundly admired, and the good qualities of his head were more than equalled by the good qualities of his heart, which caused him to bestow his beneficence in many directions.

He lived his full life of more than fourscore, with the exception of a brief illness, in vigor and capacity for work, and although his friends realized that when the time came he must go the way of all flesh, it seemed especially hard that this splendid frame could be shattered by illness.

It was an honor and a privilege to have the acquaintance and to enjoy the friendship of such a man.27

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Calvert Station: Its Structure and Significance

RANDOLPH W. CHALFANT

The Calvert Station, demolished over thirty years ago to provide a site for the Sunpapers publishing plant, presents the inquirer with material to examine the state of railroad technology in the middle of the nineteenth century, uncover some origins of the myths about Baltimore, make new discoveries about the progress of engineering and, finally, to re-examine the ideals of nineteenth-century architecture.

No one today can fully savor the impact of the railroad on the political and economic history of the United States. Historians writing about the decline of the Merchant Marine in the same period assume that this decline was deliberate in the sense that capital migrated to the rails for motives of profit only. Such a generalization ignores the power of the idea of the railroad and the excitement it provided for a country with boundless areas and a taste for the bardic in enthusiasms. One modern observer has pointed out that the canal did not deserve to be abandoned so soon as a form of highway. Railroading was from the beginning both a serious technology and a form of sport. Today there is a smaller scope for the sporting instinct, and the model railroad is surrogate for those still enamored of the technology of guided vehicular ways.

When the first sod of the Baltimore and Susquehanna (B & S) was turned in 1829, the B & O had only just celebrated its first corporate birthday. Both of these railroads and the Baltimore and Port Deposit, which soon followed. were caught up in a problem which had yet to be probed, the seriousness of which was concealed in other aspects of the development of railroads. In the early days the railroad was often conceived of as a superior and more foolproof turnpike. The introduction of the steam locomotive complicated this conception, but the idea of the railroad as a common carrier was yet to come to fruition. When these early railroads began building their lines, they began outside the built-up areas of the city. The developments of 1850 signaled the end to over 15 years of temporizing with animal-hauled trains in Baltimore city streets. During this period the three railroads exchanged traffic with each other and assembled cars for their trains almost exclusively by horse and oxen power. The reasons for giving up the animals seemed to lie with the growing perfection of the steam locomotive. Certainly, the B & S, which was forced to haul every outbound carload uphill to its outer depot at Bolton Lot, was distressed at increases in taxes on draft animals which began about 1847. They

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needed more animals for the hill hauls, and the costs had to be thought over very carefully in relation to the increased efficiency of locomotives.

In 1847 the relative situation of the three railroads was as follows. The B & O street lines extended from their outer depot at Mt. Clare to President Street along Pratt Street and north from Pratt along Howard Street as far as Franklin Street. They had a station improvised from houses and stables at Pratt and South Charles Street. The Philadelphia, Wilmington and Baltimore extended to President Street from Canton and had been able to use locomotives to that point because the part of the city that straggled between Fells Point and Old Town permitted the use of locomotives earlier than did those areas used by the competitors. The B & S had the worst portion, with tracks extending south on Cathedral and Howard Streets to Franklin Street, where it connected with the B & O. It had also a stretch of private right of way from Bolton Lot to North Street (now Guilford Avenue) at Biddle Street, where there was a small station. From this station tracks extended south on North Street to Central Avenue and south to the City Dock and a connection with the PW & B. Much of this trackage still exists.

At this time the bulk of the freight traffic was assembled by private companies who loaded cars independently and had them hauled by the railroad in accordance with turnpike rates established by the State Legislature. Passengers bought their tickets at a house which stood next door to the present House of Welch Restaurant at Guilford and Saratoga Streets and boarded cars in the street in front of the house. Everything that departed from these street lines did so in tow of oxen, except that for a few years they had been able to pull trains from the City Dock during the hours of darkness. At this time steam locomotives were permitted to haul trains of coal, ore and minerals between 9 p.m. and the following 6 a.m., provided a man walking with a lantern preceded the train.

The B & S in 1847 had accumulated astronomical debts and a complex financial history in which both the state of Maryland and the city of Baltimore were creditors. To these financial debts must be added the complexities of politics. In its efforts to make a viable route to Harrisburg, Pennsylvania, and connect with other through routes to the Ohio, the railroad had been the plaything of rival state politicians. A strategy for bringing the B & S into a position where the road could earn not only the interest on its debts, but also achieve a profit, had two main parts. Calvert Station was the result of one part of the strategy. The successful completion of the rail line to Harrisburg was the other. This was accomplished by connection with the embryonic Pennsylvania Railroad, which was organized to supplant the combination canal and railroad sections of the Pennsylvania Main Line of Public Works, Because this route promised Baltimore business men an earlier access to the Ohio River Basin and the plains leading to Chicago than the B & O was going to be able to achieve, it was considered to be a good investment. Solvency was to be accomplished by judicial capital expenditure for the purposes already described and by the creation of a large station conveniently located with relation to the center of town in order to free the railroad of the necessity of depending upon private dispatch companies to load its freight.² Such a plan was actually accomplished by adroit improvisation and brilliant planning, which in turn resulted in the unique and influential building which was called the Calvert Station.

The effect of this station on the B & O corporate strategy was remarkable, not only for the magnitude of the capital which had to be expended to overcome the weakness in their own terminal areas, which were exposed by the Calvert Station, but also by some collateral problems which were acquired as the result of acting in haste. It also persuaded the B & O that Niernsee and Neilson, the architects, should be employed to design their new station in Washington. Part of the B & S success was the result of a fortunate land acquisition which delivered to them an adequate lot immediately adjoining their tracks in North Street (Guilford Avenue), a few blocks north of their existing city station. This lot was owned by the Baltimore Water Company, which had used it up to 1845 as a reservoir filled by an open channel from the Jones Falls. This reservoir was abandoned in 1845 and was supplanted by the Roman amphitheater built by Sands and Lent which opened in 1846. This amphitheater was a glorious flop, and in 1847 its last use appears to have been to house a travelling menagerie.

There are three people who are important to the development of the Calvert Station. The first of these, Robert Mitchell Magraw, the President of the B & S. was a successful ironmonger (a business which he seems to have entered by marrying the boss' daughter). We know very little about the internal politics of the B & S Railroad; so we do not know how he suddenly appeared as President in 1847, since the records do not show any previous connection between him and the railroad. He does, however, seem to have been a man of considerable energy and vision, whose interests tended to gravitate to forming new enterprises or to revitalizing older ones. Not only was he in the iron business, but he also was a director of the PB & W, already mentioned, and later a founder and first president of the Western Maryland Railroad. He was born in Cecil County, Maryland, in 1811 and died in 1866 after a long illness.4 Magraw's tenure with the B & S was short - 1847 to 1854. He must have had a very good intuitive grasp of all of the issues facing the B & S, because he seems to have evolved the program already outlined and to have carried it out during those years. It is regrettable that we know so little about him.

The other two people of import were the designers of the station, Niernsee and Neilson, a newly founded firm of architects whose partnership lasted until the late seventies (with a brief holiday while Niernsee went to South Carolina to design and construct the State capitol at Columbia). Niernsee and Neilson appear to have functioned not very differently from a modern architect-engineer firm, in what is now called critical path contract management. The older member of the partnership, John Rudolph Niernsee, was born in Vienna May 29, 1814, and came to the United States late in 1837. Excerpts translated from an early diary kept in German make no mention of his schooling. His first employment was with an abortive railroad in Alabama and Florida. By the summer of 1838 he was looking for a job, which he found as office draftsman for B. H. Latrobe, chief engineer of the B & O.5 In this diary he announces his ambi-

tion to show that he had the talent for designing buildings which would be both economical and tasteful. He corresponded with the Allgemeine Bauzeitung of Vienna in 1842 and 1843, giving reports of building and engineering on the B & O and in Baltimore. Niernsee died on July 7, 1885, about the time he was recalled to Columbia to finish the capitol which he had begun previously.

James Crawford Neilson, the younger partner, was born in Harford County, Maryland, in 1817 of a local family and appears to have been educated in Belgium, returning at the completion of his education to be employed as an engineer and supervisor for miscellaneous railroad schemes, until such time as he and Niernsee decided to team up and open a business as architects. Unless more records can be unearthed, it will be difficult to discover who designed which of the buildings jointly named; for when they practiced separately, that is between 1856 and 1866 and after 1875, the differences in their tastes and in their capabilities for organizing work are extremely difficult to pinpoint. The firm was one of the earliest organized in Baltimore, and many of their buildings from the earliest days of their practice to the end still stand in the city. Examples are: the Thomas-Jenks-Gladding house and the Schumacher house on Mt. Vernon Place, a string of houses on West Monument Street beginning at Cathedral Street, the funerary chapel at Greenmount Cemetery, Grace and St. Peters Church, Emmanuel Church (refaced 1919), St. John the Baptist Church in East Baltimore, the Hyman Building (formerly the YMCA - much altered), and the Maryland Insane Asylum.

Niernsee and Neilson appear to have had an organized general office which not only prepared the designs for the buildings, but in the case of the Calvert Station, provided an organization service so that the railroad itself could subcontract the various parts of the work required, letting contracts in the modern critical path method when materials were required. There is enough information about the actual contracts and estimates to show that this was carried out with considerable skill; and when the architects were called on by the railroad to defend themselves from accusations of malfeasance in the expenditures on this station, they were able to provide background material which proved the charges to be frivolous.⁶

The Water Company site, which was bounded by Calvert Street on the west, Monument Street on the north, North Street on the east and Little Franklin Street on the south, provided a large site only five blocks from Barnum's Hotel, the première hotel in Baltimore and one of the most famous, if not the most famous, hotels in the United States at the time Calvert Station was built. Simultaneously with the acquiring of the lot, the railroad obtained an ordinance from Baltimore City allowing them to operate steam locomotives from Biddle Street, the previous terminus of steam operation, to the terminal lot regardless of the time of day. That having been achieved, the ground was leased and a general plan was announced on June 17, 1848. Before any demolition could be done on the site, the Roman amphitheater was set on fire early in the morning of June 25, the wooden parts completely destroyed, and some neighboring property damaged. The insurance on the building, which was only on the wooden interior, was for \$200.00. The remains of the building, which I

think consisted mainly of the walls of the former reservoir, were brick and were probably used to fill in the wetter portions of the site and the ditches which fed water to the former reservoir and some abandoned mills on the site. Work was begun in the autumn of 1848. A George McGlone, "sand hauler and cellar digger [of] 165 Park Street contracted to dig the foundation." In January 1849, the architects wrote President Magraw that the pier foundations of the portal had been built on rock or on a compact bed of gravel which had been found at a depth ranging between 15 and 18 feet below the water level in the Jones Falls near the Monument Street branch. Twenty-five of the forty piers for the pillars of the car house were complete, and the excavation for the remaining fifteen piers and for the footings of the office building had been carried on as far as was feasible that season.9 The building was begun at the corner of Monument and North Street, where the most difficult foundation problems might be expected to be met from surface inspection. John Diffly is reported as building the piers and foundations, and he built these from rubble stone furnished by the firm of Fitzhugh and Marshall. The foundations had to be carried so deep because the site was once partly a marsh and partly, in fact, the bed of Jones Falls. Lime used for the mortar for the piers and for the brick work was purchased of Robert Gilmor. A contractor named Moses G. Hindes [Hyndes?] laid the brick work. Brick was bought from Adams & Bros. The freestone trim was furnished and set by the firm of John David Maxwell. They got the freestone from York County. This was claimed to be the first time this material was used in Baltimore. By July 1849 the piers had all been completed, and the granite columns to support the roof of the car house were finished. Sumwalt and Green had cut and erected Ellicott Mills granite for these columns, which were two feet square and sixteen feet tall, including bases and capitals. At the end of August 1849, David Taylor and his workers were setting up the roof trusses.10 These trusses had been framed up by Mr. Taylor from lumber furnished by Samuel Small & Sons and by Henry James, using iron specialties and tie rods fabricated in the company shops under the direction of Isaac Denmead, the master of machinery of the B & S Railroad. The quantities of iron used were the subject of accusations brought up by the Baltimore City Council. The firm of Hartshorn, Rodgers and Magraw furnished about 15 tons of bar and rod from which these specialties were made at about \$72.50 a ton. All of this material was not used in the roof. The trusses had been designed by the architects, and their erection was supervised at the site by William A. Powell, who was the architect assistant in charge of the Calvert Station. This roof will be discussed later in the article with reference to its engineering quality.

An undated daguerreotype of the Washington Monument taken from the top of the Shot Tower shows the car house roof under construction in the middle foreground. The office building is not visible. The picture shows the trees in the vicinity still in leaf; so that we have a possibility of dating the photograph with some precision, since the complete roof frame (20 trusses) is shown with its bare purlins. Considering that they began at the end of August, it seems likely that the entire month of September was occupied in erecting the trusses and purlins. The picture must have been taken in October of 1849.

Although not entirely complete, the station was opened for public use on June 3, 1850, about four months after the President Street station of the PW & B, which was opened on February 19, 1850.11 Tickets were sold from a specially outfitted car. When the Calvert Station was opened, it was the largest railroad terminal building in the United States. It had the largest clear span roofed car house in the country. At the beginning of the project the architects had estimated its cost to be \$43,000.00. This estimate was revised in March 1850 to \$48,000.00, including the tracks, walls, fencing and platforms. At the time of the publication of the annual report in September 1850, the cost had risen to \$52,250.00. As the work was done piecemeal in a year in which costs had been greatly inflated by the effect of the California Gold Rush, the increased cost does not seem as significant to us as it would be to people then. I cannot say that the cost of the station passed without comment, since questions were asked in City Council about the total cost of the station which was made a subject of an official question by the second branch of City Council late in March 1850. Certain parties in the Council were suspicious that President Magraw had been lining his purse at the expense of the railroad, which had at that time expenses guaranteed by the City interest in the capital of the railroad. The railroad made a meticulous reply to the charges, and this is one of the reasons why so much information is available about the contractors and even about the quantities of work they did for the station building. The answers given by the railroad to the City appear to have closed the issue, although the copy of this printed report in the possession of the Maryland Historical Society is annotated by B. H. Latrobe, who has underlined sentences and added comments which indicate his scorn for the truth of the assertions. 12 It was some time before Mr. Latrobe and his Baltimore and Ohio colleagues were able to appreciate the full import of the B & S Railroad's achievement at Calvert Station. Although the development of the Camden Station is another, and in many ways a more fascinating story, it is doubtful if anything would have been done had it not been for the real threat created by this shiny modern facility. When the B & O announced its plans for a city terminal, it was for a budget tens times that paid for the Calvert Station building, and, of that, one half million dollars (almost half) was earmarked for the acquisition of property on which to locate the station.

Since the Calvert Station lasted for nearly ninety years with scarcely any change in its external appearance from the day that it was opened for traffic, the architects' description, which we quote in full, is a good starting point to become acquainted with its special features.

When completed, the depot will consist of a carhouse 315 feet long, 112 feet wide, occupying the diagonal of the square of ground owned by the Company and terminated at the end of Calvert Street by a large building, with a front of 112 feet, in the Italian style, two stories in height, containing the principal passenger entrance, ticket office, transportation and other offices, with the necessary rooms for the President and Directors, and fireproof vaults for securing the books and papers of the Company. On North Street the carhouse will be terminated and supported by a massive portalin the same Italian style

affording the entrance, by an easy curve, for the passenger and tonnage trains. The roof of the carhouse, spanning one hundred feet clear, will be of sheet-iron sustained by a series of trusses of a simple form, easily adjusted and repaired and depending for all the essential ties on wrought iron — comparatively indestructable. The pillars are of cut granite. The space contains two passenger tracks and broad receiving and distributing platforms for goods, which can be taken off and on under shelter of the six-foot projecting eaves of the roof. The diagonal position of the depot building permits the easiest and best access for both passengers and trains and offers for future buildings the most frontage on the four streets encompassing the square.¹³

Nothing could indicate more clearly the prevalent social difference between antebellum America and Europe at the same time than the grand simplicity of the Calvert Station. The gregarious egalitarianism of the United States of the period is graphically contrasted with stratified European society. In Europe, particularly in the German speaking areas, no terminal station could have been arranged this simply. Four separate classes of passengers and royalty had to be served. They had to be served without making contact with each other. A German station of the same importance as Calvert Station would have had to have two separate buildings for passengers: one for departure and one for arrival, each with duplicated facilities for each class of traveler. Initially, there was no alternative for the European architect except to build long rows on each side of the terminal tracks. European architects assimilated these demands into the traditional canons of architectural composition. As a result, the idea of making the train shed the center motif of the composition becomes a canon of good design. The idea of featuring the roof is strongly reinforced by the sentimentality Europeans seemed to have about technological achievements. Early stations in Berlin, Leipzig, Zurich, Naples, Amsterdam and Prague, for example, featured the end of the train shed as a kind of monumental gateway through which the locomotives of incoming trains steamed into a forecourt containing a turntable where the locomotives pirouetted, so to speak, in front of an audience before going back through the shed to be used for an outgoing train. Although the locomotives were soon banished from view in later terminals, to be replaced by office buildings, hotels and the like in front of the sheds, the actual entrance or exit for passengers would be around on the side despite the monumental appearance of the front.

At Calvert Station, the center of the architect's composition is the same as the path of the traveller and the axis of the track he is to travel on. It is this very simplicity which is the key to the central design and its relation to the city.

A number of years ago the late Carroll Meeks published his important thesis, "The Railroad Station." This has never, to my mind, received the attention that it should for the way that it clarifies the theories of architecture which arose to meet the entirely new demands of nineteenth-century buildings. Meeks distilled a set of six rules, or standards of judgment, from the writings of Scott, Wyatt, Semper, Viollet-le-duc, VanBrunt and Goodyear, which I paraphrase as follows:

Modern building must be judged as follows:

- 1. Does the structure adhere to the principles of the construction required?
- 2. Is the exterior and expression of the purposes housed either (a) ideally, or (b) literally?
- 3. Are the forms employed free and independent of literal comparisons with other forms?
- 4. Are allusions to other forms relative to the purpose and coordinated in execution?
- 5. Are the materials suited to the use of the building and representative of the potentials of the age?
- 6. Is the final result simple and comprehensible?

These criteria are a rigorous demand on any age. It will become evident, however, that the Calvert Station building responds well to all of these questions. All of the constructural features are true to their purposes. There is no material sham or ambiguity. Wood is not used to represent stone. Metal is not used to represent tile. Masonry arches are used as lintels.

The exterior expresses the interior literally and perhaps ideally as well. The towers are the result of thinking out the best expression of the station, located as it was obliquely in a rectangular city block. They set the station into the street scene. They call out the importance of the building in each direction from which the station is approached. Since they rose above the then-prevailing 30- to 40-foot roof lines, they would be seen from a distance. The fact that the towers are perforated with openings which remind one of a belfry is a weakness. There were no bells, but the designers probably felt that these openings helped to compose the tower faces.

Are the forms free and independent of allusions? It would seem on the surface that, as has just been stated, the towers being expressed as belfries falls short of an inspired conception. However, the silhouette of the towers with their overhanging cornice and their shallow pitched roofs, together with the spacing in relation to their height, is not unlike twin pylons of a gateway, and it is not impossible to think that their shape and silhouette were intended to allude to a familiar Georgian gateway form. The decorative forms applied at doors and windows are frank expressions of archstones and range from perfectly flat, slightly raised plane surfaces to a very sophisticated, but very individual parody of classical molding at the main doors and around the windows above them which lit the railroad's board room. These moldings are individual to the building. Although all of the decorative forms used on the openings and cornices are faintly suggestive of either "Italian" or Georgian, they are very freely constructed and are used expressively.

The materials used are very well suited to the building. Soft porous Maryland brick is stuccoed on the office building to make it waterproof. The stone used is from local quarries with one exception, this being the reddish York County freestone which was used for the door trim and which advertised the fact that the railroad would make available new materials over its route. The question of whether the final result is simple and comprehensible must rest with the beholder. One observer who wrote for the *Sun* about fifty years ago

ridiculed Calvert Station because of its towers, stating that without its towers the main body of the station office building was just the sort of Georgian building that might be found anywhere in London. There is an element of truth in the assertion that Calvert Station would have been at home in London, but it was because of its towers, which resemble London Bridge, Kings Cross and Bricklayers Arms stations built contemporaneously with the Calvert Station. Perhaps one reason for the towers lay in the fact that if one stood near the front of the Calvert Station and looked up the hill at that time, instead of the continuation of the street above Eager Street, the view was stopped by the lawns and trees and a view of the mansion of John Eager Howard called "Belvedere." The outline of this house and the outline of the station were sufficiently similar to call for towers to complete the station composition.

A floor plan of the lower floor was contained in the cornerstone, opened in 1848. There was a center hall which led from the street to the tracks, and there were two large rooms on each side of the center hall. One of the front rooms on the left contained a monumental stair to the offices above. The rooms on the right contained a ticket office in the front and an office of the Transportation Superintendent, On the left behind the stairs was a Ladies' and Gentlemen's waiting room, a small Ladies' retiring room and a baggage room. The Ladies' retiring room had a toilet room which was in the bottom of the left hand tower. This toilet was equipped with water closets. Men were forced to go up the main stairs to a toilet located over the women's in the same tower. The water closets demonstrate another difference over European usage. While we should be careful not to assume that anybody could use them, it is certain that any neatly dressed white person could use the waiting room without challenge. It is probably doubtful that any black, free or slave, would dare to use the water closet. Nevertheless, the freedom accorded persons of what the European would call "lower" stations of society is an almost unvarying observation of literate European travelers in America, whether they were favorably disposed to social equality or not. The American traveler, as numerous Europeans complained in their diaries of travel, was everything from the simplest laborer to the grandest gentleman; and they sat in the same car, in the same kind of chair, without even the shelter of a compartment. The poorest felt free to speak to the grandest and usually did.

No upper floor plan was found in the cornerstone. It is only a guess that the board room was in the center over the main entrance and that President Magraw had one of the front rooms. Behind these front rooms were large areas well suited for accounting and general offices. Though not expressed on the main elevation, there was a complete third floor reached by a separate stair which was lit by skylights and by windows in the frieze at the back. Chimneys served fireplaces in the principal rooms.

The car house caught the attention of the press and the public. Baltimore newspapers were cautious, describing it only as "without parallel in this section of the country." Actually, there is no record of a larger roof span in the entire nation that year. The trusses, twenty in all, were supported on two col-

onnades of square granite posts about sixteen feet high, complete with bases and capitals. These posts supported continuous timber sills on which the trusses were bolted. The trusses were of composite construction: timber was used for members in compression or bending or for members dubiously stressed (i.e., alternately in compression or tension); iron was used for connections and members in tension. The working truss, trapezoidal in shape, was what would now be described as a queen-rod type with counterbraces. On top of each was a kind of annex truss to complete the triangular outline of the roof; this part resembled a king-rod truss. The resulting construction was complicated from the point of view of mathematical analysis, but worked well for a longer period than some more knowing designs built shortly thereafter. The 100 feet of the span was nominal; the shed was 98 feet clear between the granite posts and 99 feet clear between the faces of the wood sills. The whole roof was 112 feet wide. These were probably the largest Howe roof trusses ever built on the queen-rod principle. This roof withstood the snow load of the blizzard of 1899 which felled the roof of the President Street Station.

One feature of the car house roof was not noted in the architect's description. The roof ridge was surmounted by five hipped-roof louvered ventilators equally spaced and each about fifteen feet square. The ventilators do not appear to be adequate to take away locomotive fumes. It is more probable that they served to exhaust the fumes from the gas lights. Nine circular gas jet rings and connecting piping were in place when the car house roof was dismantled. One of these rings is now at the Peale Museum in Baltimore, where it is shown in an exhibition commemorating Rembrandt Peale's first public exhibition in 1810 of gas lighting in America. The Calvert Station ring corresponds to the description of the light in Peale's experiment. The rings are very simple, a circle of pipe sixteen inches in diameter with sixteen tiny jets welded on the top. This ring, about three quarters of an inch in outside diameter is suspended by a tee-shaped pipe, the outer ends of which connect with the inside of the circle. The gas flowed through the suspending pipes to the ring and jets. The presence of the undisturbed apparatus would have served to date the roof, had there been no other evidence of its age.

Aside from scheduled passenger trains, we have no clear idea how the station was used or how well its design served the purposes. When the station opened, a typical day began with a train arriving at 8:30 from York; this was followed by the departure of a train for York at 9:00 a.m., and again at 4:00 p.m., ending with the arrival of a train at 5:30 p.m. Two house tracks would suffice for these trains. The train shed was called a car house; and it is certain that in many cases, for example at the Southern and Western Depot in Philadelphia, such sheds were used to garage unused passenger rolling stock.

Whether locomotives penetrated the shed at first is not known. Certainly Commodore Vanderbilt found no difficulty in ordaining that the great metal and glass shed at Grand Central in New York should be smoke free when it was built two decades later. Trains were fly-shunted into that shed, a procedure of hair-raising danger, in which the locomotive is uncoupled from its moving train and accelerated into a siding in time for the train to coast by on the

next track. Calvert, situated at the bottom of a grade and with no locomotive facilities nearer than Bolton Station, could plausibly have been operated by coasting the inbound trains from Bolton. Since two engines were required to get trains up to Bolton against the grade, these probably backed down shortly before a train was due to depart. A turntable and locomotive service facilities closer in were not built until after 1873. In addition, there were no cross-over switches in the pairs of tracks in the shed, so that an incoming locomotive would be trapped behind its cars.

These conditions suggest that the shed was a car house for a long time and that the cars were coasted in. In 1851, Murray & Hazlehurst built at their Vulcan foundry a large locomotive whose special purpose was to work trains up North Street and which had its wheels and gear covered so as not to be so alarming to horses. It weighed eighteen tons, which was mammoth for its time. Freight traffic was carried on by forwarding companies, nine of which had located their depots along North Street before the end of the first year of operation. The street between Saratoga and Center was lined with spurs, two more depots being added the next year. One of these forwarding companies still maintains its name and business, P. A. & S. Small of York, Pennsylvania, who then traded as P. A. & S. Small's Produce Despatch.

The station was still being lightly used for passenger traffic in 1869, when there were six inbound and six outbound trains each day. After the completion of the Union Connecting Railroad and the Baltimore and Potomac Railroad in 1873, the Calvert Station began to absorb the new traffic created by these connections. Also, after 1873 the trains from Calvert no longer had to climb up the Belvedere Hill, since a more gradual route had been built through the Jones Falls glen to the Union Station on a level lower than the Bolton lot.

In the 1870s, when the city line was still at North Avenue and the built-up area was only just then spilling across the city lines, these new railroads which circled the built-up area of the city exerted a force analogous to the Baltimore County Beltway in determining where manufacturing, business and new residential development would occur. Initially, the new Union Station was too far from the center of business, so that most trains were run into Calvert for the convenience of the traveller. In 1883, which appears to have been the peak year, eighteen outward and a like number of inward trains used Calvert daily from the Baltimore and Potomac (of which ten were for Washington, three for Richmond, three for Annapolis and two for Pope's Creek), in addition to regular Northern Central mainline trains. Commuter trains to the north had increased to such an extent that there were two Parkton, seven Cockeysville, and three Greenspring trains, all of which must have strained the station to its limits and necessitated building a new ticket office on the platform under the shed. By the turn of the century, the cable cars and trolleys connecting downtown with the permanent new Union Station, built in 1886, drastically reduced the number of passengers using Calvert; and by 1922, the parent Pennsylvania Railroad tried to abandon passenger service to this station. The rapid growth of the street railways, later electric, changed residential and business patterns; and the B & O built the Mount Royal Station (on the site of Bolton Station) on

its new Belt Line going to New York. Calvert Station continued to serve the commuting pattern of patrons as far north as Parkton until the ultimate termination of the train service in 1958. No doubt this helped to keep many law, insurance, and investment houses in offices along the brisk walk from Calvert to the Courthouse, and their managers in homes not far from a Northern Central Station.

Calvert Station occupies a significant position in the history of American railroad station architecture. It originated in order to facilitate steam traction from the city center, bringing to an end an era of dual traction of passenger trains. It was a prototype of the planned, multi-purpose terminal in place of the helter-skelter proliferation of miscellaneous buildings. Its tenure as the nation's largest station was brief. Details of its design were reported in the general and technical press before it was completed, and rivals were soon constructed that surpassed it in size. Nevertheless, they thereby endorsed the original conception of the Calvert Station. From the aesthetic point of view, the building was planned according to the standards of the age and for a purpose for which there were no historical precedents. For that reason alone, Calvert Station can be said to be the first modern building in Baltimore.

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- 8. Calvert Station, cornerstone papers. Personalities named are taken from holograph list of contractors.
- 9. Niernsee and Neilson, to R. M. Magraw, January 9, 1849, printed as appendix no. 6 to B.&S.R.R. Annual Report, September 30, 1849.

10. Baltimore American and Commercial Daily Advertiser, August 28, 1849.

- Baltimore Sun, February 19, 1850, for President Street; Baltimore Clipper, June 4, 1850 for Calvert.
- Communication from the directors in the Baltimore and Susquehanna Rail Road Company on the part of the city....April 8, 1850.

13. B.&S.R.R. Co. 20th Annual Report.

14. C. L. V. Meeks, The Railroad Station (New Haven, 1956).

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Professionalism and Civil Engineering in Early America: The Vicissitudes of James Shriver's Career, 1815–1826

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The War of 1812, and the events leading up to it, spawned the American "transportation revolution." The reasons for its appearance were bound up with nationalism, expanding population, growing capital, and the demonstrated value of roads, canals, and railroads for defense purposes, economic stimulation, and the opening of the West.¹ This revolution in the young country, despite its breadth and the energy of its proponents, was not a smooth, effortless transition. It had its contemporary critics as evidenced in the numerous constitutional questions and political harangues aired in the halls of the United States Congress.² The revolution caught the nation unprepared. Prior to the second war with England there were few professional civil engineers in America to design and implement internal improvement projects.

Daniel Hovey Calhoun has examined the paradoxical problem of the professionalism of and the need for American civil engineers.³ Calhoun's book views the whole of civil engineering, and his treatment of individual engineers is generally restricted to those reaching the top levels of the profession, such as Benjamin Henry Latrobe and Benjamin Wright. The purpose of this essay is to examine the dilemma of the struggling "professional" civil engineer through the career of one pioneering practitioner, James Shriver. Civil engineering did not fully develop into a profession until the mid-nineteenth century, long after Shriver's death in 1826. Shriver's career clearly portrays a man who increasingly strived and hoped for advancing his status as a practicing civil engineer. To the degree that any "professionalism" existed in the early 1820s, James Shriver believed he had achieved it. The existence of many of Shriver's personal papers, the time of his career, and his connection with two of the most important projects — the National Road and the Chesapeake and Ohio Canal — make him a subject worthy of study.

James Shriver's birth in 1794 coincided with the beginning boom of internal improvement projects, especially in Maryland, where his family moved in 1797. For more than a generation after the end of the Revolution, Maryland was a leader in internal improvement projects. Beginning with the Potomac Canal project encouraged by George Washington in the 1780s, Maryland's in-

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volvement included such major works as the Chesapeake and Delaware Canal, the National (or Cumberland) Road, the Chesapeake and Ohio Canal, and ultimately the Baltimore & Ohio Railroad in 1827.4 In the midst of all these projects were dozens of turnpikes spanning the state. Between 1783 and 1807 the state incorporated twenty-two transportation facilities out of a total of forty-two incorporated companies and these included five canals, ten turnpikes, and seven toll bridges.⁵

Behind this intense activity was an increasing use of and need for transportation facilities, commercial rivalry, the beginning of the construction of the National Road, and the success of the Erie Canal. The basic need was the increasing demand for transportation routes. Added to this was a tremendous commercial rivalry between Baltimore and Philadelphia, fostered by the rapid rise of Baltimore in the last quarter of the eighteenth century. Then, the construction of the National Road in Cumberland beginning in 1811 encouraged the building of local roads over the state. In a similar fashion, the success of the Erie Canal in New York in 1825 prompted Marylanders either to improve their transportation facilities or lose tremendous economic benefits. Their fear led directly to the construction of the Chesapeake and Ohio Canal and the Baltimore & Ohio Railroad in the later 1820s.

James Shriver was born into the right family to take advantage of the growing employment opportunities offered by these projects. Andrew Shriver (James's father) and his brother David Shriver, Jr., had already settled in Frederick County specifically to take advantage of Baltimore's rise and the resultant transportation arteries emanating from it. The Shrivers were wedded economically to the port town, operating saw and grist mills. In 1810 Andrew Shriver revealed that his Union Mills property was valuable chiefly for its "never failing Stream of Water Strong enough to Carry Works of any description" and its location "on the main turnpike leading from "Balt[imore] to the Western Country which for an age at least will be the Grand thoroughfare between the Atlantic & Western Waters..."

Along with the economic achievements of the family, the Shrivers were politically influential. As leading Republicans, they held so many offices that the Federalist Frederick-Town Herald once used the Shrivers as a prime example of the opposition's concern with "providing snug places for themselves and friends..."9 This meant that they were greatly involved with local and national improvement projects. For example, the main issue of the 1801 election was a local road and Roger Nelson, a member of the Maryland legislature, reminded Andrew Shriver of "the Necessity of exciting ourselves to get Republican Electors in September, a great deal depends upon our County, and our County depends greatly upon your district. Impress it upon the Voters that a change of the Senate will secure them the Road."10 The Shrivers also had the ear of Samuel Smith, a Maryland Congressman and longtime supporter of internal improvements.11 With such influence as this, David Shriver, Jr. gained the superintendency of the Reisterstown Road project in 1808 and the position of Superintendent of Construction of the National Road in 1811. Andrew began his lobbying for the latter plum in 1810 by corresponding with Alexander

McKim, a Maryland Congressman, and his brother Abraham Shriver¹³ and finally resorted to a visit to the nation's capital in 1811. In Washington he visited Albert Gallatin and several other political leaders on behalf of David and his sons.¹⁴

As James Shriver reached maturity during the second decade of the nine-teenth century, he was directed to civil engineering. The Shrivers were a strongly traditional German family who believed in equipping their sons with a vocation. Not only did David Shriver, Jr. practice civil engineering but so did three of Andrew's sons — Thomas, James, and Joseph. But more than tradition entered into James's decision to join his uncle on the National Road. The only way to become a civil engineer before the mid-1820s was to serve an apprenticeship. In 1816 the renowned engineer and architect Benjamin Henry Latrobe declared that James's uncle David was "a man experienced in the construction of turnpikes, and whom it is unnecessary to praise because the work itself is his highest commendation." To a boy brought up to appreciate the importance of roads, what better direction to go than to work on the greatest of the American road projects, the National Road, and to be tutored by a leading American civil engineer.

James Shriver became his uncle's assistant in the summer of 1815. By then the National Road had been under construction for four years, all under the supervision of David Shriver, Jr. Progress had been excruciatingly slow, delayed by weather, equipment, incompetent and inexperienced workers, and contractual problems. In December 1813 the first ten miles had been completed; three years later only another eighteen miles had been added. 16

James Shriver had been taught the rudiments of surveying and had some knowledge of road construction through the work of his father and uncle during the previous decade. But James himself, despite the forceful encouragement of his father, 17 viewed the whole affair with apprehension. Arriving at Cumberland near the end of July, James composed a revealing confession: "I intend going to the road on Monday next — to begin my new occupation. I am fearful I will labor under some [difficulty] on account of my deficiency in the Knowledge of road making etc." He added, however, that Uncle David "appears much disposed to aid me, and establish me in that Kind of business" and that his predecessor, Kirkhead, had promised to help him make the transition. 18 But even David Shriver. Jr. had some doubts about his twenty-one year old nephew, 19 It appears that James was hired on probation; he started on the road in late July but was not approved by the Secretary of the Treasury or officially offered the assistant's position until a month later. Not until the very end of 1815 did David Shriver, Jr. indicate the likely furtherance of James's career. David encouraged his brother Andrew to lend him money for the purchase of the necessary equipment. "Much depends on respectable instruments, faith is often times secured by appearance, byside [sic] the satisfaction a good instrument affords a person who is hourly handling it."20 James's apprenticeship had begun.

James learned his job rapidly and a year later was exuding all the self-confidence of an experienced professional. In 1815, his first responsibility was to help supervise construction of the 375 foot three-arched stone bridge that crossed the Youghiogheny River at Somerfield, Pennsylvania.²¹ He assisted his uncle David in drawing the plans for this bridge which was completed in mid-1818.²² In 1817, he described the construction of the bridge and added

I could not help but smile when I thought of the fuss they had in framing and raising the centres at Pipe Creek bridge. It might be truly said that they were in their infancy that is as bridge builders. What a ridiculous appearance that bridge would have in the neighborhood of some of the bridges we are now constructing or what a contrast would there be between it and the Yough bridge. ²³

After this experience his responsibilities were amplified. By the end of 1819 he had the "whole & sole management & control" of the twelve miles of road between Uniontown and Brownsville in Pennsylvania. When money was appropriated in 1820 to lay out the route from Wheeling to the Mississippi River and David Shriver, Jr. left to examine it, James was placed temporarily in charge of the National Road operations back east. His uncle noted that James's "experience, with his other qualifications, will enable him to discharge the dutys, with Credit to himself and to the public advantage." Analyzing both his nephew and his other assistant, Jonathan Knight, David Shriver, Jr. went on to state that these "two young men [are] possessing good health, superior minds, who have been and are disposed to arrive at the greatest degree of perfection in their business and whose knowledge at the present time is considerable... I consider them valuable to the government..." A colleague even suggested in 1820 that James Shriver should succeed to the top post on the National Road, James was, in his opinion,

a Gentleman of incorruptible integrity — of Several years experience in this kind of business — of intellectual indowments greatly superior to his uncle the superintendent and could attend to it with less expense to the Government that any other person.²⁶

James attained his self-assurance with difficulty. Occasionally he complained of the weather, country, and homesickness. But these were minor matters compared to his complaints about his vocation's political trappings and meager salary. In late 1816 he even drafted a letter of resignation to his uncle citing the numerous contractual difficulties, local controversies, squabblings among the crew, and "the many unpleasant circumstances which daily occur on the work." But James's annoyance with his political milieu gradually disappeared and, in later years, he accepted it as necessary and even as an advantage to his career. Still, his complaints concerning his salary, because of the constant jeopardy of Federal funds, increased.

However, the pivotal point of James's career was his marriage to Elizabeth B. Miller in early 1819. His father cautioned him against adding responsibilities at this time because of the danger of minimizing his vocational achieve-

ments: "your engaging in such a connection (at this time) would in some measure be a Clog in your exertions in this way, because the nature of your business is such as to require (in the outset) all your attention, and also requires you to be shifting from place to place, which is not so pleasant after a connection of this Kind is formed"28 Andrew's fears materialized. Within one year James's salary complaints increased and suspicions regarding his uncle blossomed. He related to his father his uncle's reluctance to allow him to petition for additional salary. He attributed this to his uncle's "timidity in such matters, & because I was a relation" and asked if perhaps Samuel Smith might exert some influence on his behalf on the Secretary of the Treasury.29 Andrew reassured him that a great future was in civil engineering and emphasized that "a good part of your life has been devoted to this pursuit which will have been thrown away if you begin merchanize [sic] and another apprenticeship will have to Commence and I do not think you are by nature cut out for that Course." Even with Andrew's persuasions the dialogue continued into early 1820. James emphatically stated that he would not quit "so long as their [sic] is a prospect of a continuance of my salary or advancement in my present calling." But he did not believe the government would continue the road's appropriations. By now he also had little faith in his uncle David:

The fact is I do not think (at least whilst we continue in the same employ) that Uncle will do much to bring me into notice. I have always thought and am still of opinion that he considered me rather as a *clog* in the wheel of his fortunes, and that he would at any time have sacrificed me to his interests. I know at one time (about 2 years ago) when a Storm was about gathering and he had doubts whether his boat would bear us both Safely to Shore, he persuaded me to leap *overboard*, by way of securing his own landing. This I did not esteem a very generous act, and have thought ever since, that at the appearance of the least squall, I was viewed in the light of *ballast*, that would be better over board than in the way.³¹

Despite his suspicions, James was hopeful about his future for a brief time after this. He knew that his father was lobbying for him, 32 and it appeared quite likely that either uncle David would resign, thereby opening up the superintendent's position, or that the extension of the National Road to the Mississippi would provide better opportunities or at least a more steady job. He also recognized that his uncle was actively seeking more monetary emoluments for him. 33 But the length of time required in laying out the extension of the road westward and the drying up of federal appropriations brought James's career on the National Road to an abrupt end in mid-1821. And this ended the first phase of his career.

Facing unemployment was not pleasant and James immediately resorted to what he perceived as his best opportunity — a business connection with his father-in-law, John Miller of Uniontown, Pennsylvania. Miller, once reputedly worth \$50,000 to \$100,000³⁴ encountered hard times in the early 1820s and Shriver's mercantile endeavor ended in failure by early 1823. Miller, a mer-

chant in Uniontown, had cascaded into bankruptcy with a number of poor loans and investments; Shriver's unadvised co-signing of a portion of these and his limited capital dragged him along with his father-in-law.³⁵ The affair intensified James's desire to return to work as a civil engineer for in January 1823 he was eager to return on the National Road project as an assistant at his old salary.³⁶ Indeed, he never lost hope of rising in his profession even when unemployed. In 1822, for example, he named his son Samuel Smith Shriver, in honor of his family's patron and one of the ardent proponents of the country's internal improvements.³⁷ His residence at Uniontown was more than coincidental. It was the home of Albert Gallatin, Daniel Sturgeon, and Andrew Stewart, all staunch defenders of the National Road and on its route.³⁸ But the furtherance of his career depended upon Congressional appropriations, and these did not come for a time.

Prospects brightened briefly in early 1823. In late February Congress appropriated \$25,000 for repairs of the National Road between Cumberland and Wheeling to quell the complaints pouring in about the condition of the thoroughfare. The act called for a superintendent at \$3.00 per day and was the first major appropriation in nearly three years. ³⁹ Several weeks before this, Andrew Shriver notified James that he had written on his behalf to Samuel Smith and Henry R. Warfield (another Maryland Congressman) requesting that James be appointed the superintendent. ⁴⁰ As soon as the act passed, Andrew Shriver cautioned his son that "such an oppy. is not to be Neglected. It is a handsome Salary these hard times for a person in your situation, beside by *keeping your hold* on the Road, and Conducting with *propriety* you will be likely to be *Cont'd* for no doubt it [the road] will have to be kept up in some way — let me therefore repeat, don't let it Slip through your fingers by neglect on *your* part, what can be done here shall be done for you." ⁴¹

But the appointment did "slip through his fingers" as all his old suspicions concerning his uncle David returned. Responding to his father in mid-March, James revealed his convictions that David would in fact become superintendent, despite his uncle's insistence that he would not accept it and would recommend him. James pleaded for his father to dissuade his uncle:

I think Uncle ought to give me the opportunity of introducing myself to public notice, surely he cannot care about getting future employment, and if he does he is well aware that his Character is so fairly established, that he will never be lost sight of when trusty or faithful agents are wanting. His acceptance of the birth [sic] now offered might indeed rather be an injury than a benefit to him, it would be saying, that he is willing to give his time and experience for any price, and that he does not set a sufficiently high value on his tallents. In a word, if he accepts the appointment he will be doing a thing that will not in the least add to his Wealth, or Standing, and one that will, deprive me not only of a decent means of livelihood, but also of an opportunity of Showing to the government that I am capable of fulfilling the duties of the office with advantage and fidelity.⁴²

Because of the intense pressures in favor of David Shriver, Jr., due to his experience James lost the appointment and reluctantly turned to another method to secure a civil engineering position.⁴³

In early July 1823 James Shriver notified his father of his intentions to reestablish his reputation as a civil engineer through the publication of a pamphlet and map on the proposed route of the Chesapeake and Ohio Canal. He complained of his inactivity except for "some few little odd jobs," a "peculiar situation that first induced me to attempt the publication of a work..." He was encouraged in this project by his father and uncle, and he sought his father's advice. "For mine own part," he continued, "I can not but think the map will do me some credit, and the work together if it does not produce, what will pay me handsomely for my trouble will at least add to my reputation and establish a name for Civil Engineering, which in fact are the principal objects I aim at." He planned to spend some weeks in surveying and then to prepare the work for publication "in time to offer to the United States and States legislatures immediately after there [sic] meeting."

James's embarkation on this scheme was in fact an indication that he had further matured as a professional engineer. In late 1819 David had confided to his brother that James should retire from this profession because he could not handle its political aspects: "It always appeared to give him Considerable pain and uneasiness, and so far as I could Judge, their [sic] was nothing pleasing in the employ to him, and in short to anyone except the Salary." Yet in 1823 and 1824 James Shriver would visit Congressmen, write letters, and use his book as a political tool. These endeavors marked the beginning of his most successful years.

Between the summer of 1823 and 1824 the book absorbed much of his attention. By August 1823 he had completed his surveys and in the following month planned to return to Maryland to consult with his father. He then contracted with the well-known Baltimore publisher, Fielding Lucas, Jr., to publish the work and to split the costs and profits. Publishing 500 copies at \$3.00 per copy would produce a profit of between \$500 and \$600 each. Andrew was in complete agreement with this plan. According to him Lucas was the best "to give Celebrity to the Performance for that is of more value to you Situate as you are than money"; it was not to be "a catch penny performance." Two months later he further advised his son's care to "prune away the Superfluous part of the Composition." By the end of the year the work was nearly complete and James became more apprehensive about its success. He traveled to Frederick to have his Uncle Abraham review it, believing in its importance in "establishing or destroying" his "reputation" as a civil engineer. The finished work appeared in January or February 1824.

An Account of Surveys and Examinations with Remarks and Documents, Relative to the Projected Chesapeake and Ohio and Ohio and Lake Erie Canals⁵¹ was not significant on its own merit; today, in fact, it has been completely forgotten except, perhaps, as a Lucas imprint. The 116-page pamphlet

consists of several main sections all related to showing that the Chesapeake and Ohio Canal could successfully cross the Allegheny summit: a topographical description of the area between the "waters of the Potomac and Youghagany"; an explanation of his map; a statement of the feasibility of connecting the Chesapeake and Ohio; a description of the canal route; expense estimates; a statement of the advantages of canal over land transportation; a collection of letters about the Ohio and Lake Erie Canal; and, finally, an appendix describing other successful canals. The work was little more than a pastiche of others' thoughts. Most of it consisted of letters from people like Robert Goodloe Harper, Charles F. Mercer, Thomas Moore, Andrew Stewart, and James Geddes. The most significant parts were the topographical descriptions, which he compiled first-hand, and his map — a handsome and informative work which probably resulted from the expertise of Lucas. 52

Although the publication itself was generally unremarkable, Shriver managed to use it successfully to further his career. In the preface of An Account of Surveys and Examinations, Shriver said originally it was "not for the purpose of publication" but for a few friends, to show them the "practicability" of these projects. Alas, he was persuaded, because of its importance, to publish it.⁵³ Nothing could be further from the truth. In the fall of 1823, even before it was published, Shriver launched a full-scale campaign of self-promotion, his major selling point being the intended publication.

The key to his success was his election, along with Albert Gallatin, to represent Fayette County at the Chesapeake and Ohio Canal Convention held in Washington City, November 5–8, 1823. The outgrowth of earlier meetings, this meeting's call to build a canal from Georgetown, Maryland to the Ohio, and an extension from there to Lake Erie, was perhaps the most important of the expressions of public sentiment that ultimately led to the commencement of the project. It was certainly a major turning point for James Shriver; one historian aptly and correctly suggested that he "attended, no doubt, more out of the personal interest which he felt in such works than as a representative of the public sentiment of Pennsylvania."

No sooner had James Shriver been elected to this meeting than he turned to his father for the finances to attend. 66 His eagerness was intensified when he learned that plans had already been made to publish the minutes in full, no doubt seeing another opportunity to gain more recognition as a civil engineer. 57 James had no difficulty in securing the desired assistance from his father who recognized the tremendous potential of this event for his son. "Much will be expected from you...," he wrote, "and a good deal depends upon how to acquit yourself at this meeting an opinion will then be formed of your abilities and you will rise or fall as you succeed before them." James thought little about the meeting itself except as a blessing from on high to peddle his forthcoming publication and to use it as a mechanism to gain a civil engineering berth. On the way to the convention, he stopped in Baltimore to speed the publication, fired by the contents of a letter from Andrew Stewart, a Congressman from Uniontown, Pennsylvania and a great friend of the family, saying that his map was "in great request."

Shriver lingered after the convention to take subscriptions and to make contacts with politicians, much as his father had done over a decade before. By early December, however, he felt that his "prospects" were very uncertain. He had a great fear that, because President Monroe and the Secretary of War, John C. Calhoun, believed that military engineers would work better and more cheaply, the eventual appropriations bill for the Chesapeake and Ohio Canal would stipulate the sole use of such engineers. This led Shriver to state that his preference was for the position of superintendent of repairs on the National Road; "if gates are erected the berth of Supt. will be permanent and would even at a small salary be preferable to anything else."60 He continued, nevertheless, to attempt, with the aid of Andrew Stewart, to gain some official notice of his map by the Congress. Stewart cautioned him that they should be careful since a refusal of the House to do this "might be an injury to the character of the work." But Shriver was still pleased with subscriptions, projecting that as many as fifty or even a hundred Congressmen might purchase it. 61 There were even hopes that the Maryland Legislature might endorse it. 62

After leaving Washington to finish his publication, James Shriver's attention was redirected almost immediately back to the capital city. At first he was pessimistic. In mid-January he noted that appropriations were about to be approved for surveys and the preparation of plans for roads and canals but added "it seems to offer no berth that I could hope for. The bill provides that the President shall employ two Civil engineers" along with the military engineers. He doubted his qualifications. "I presume these Civil engineers will have to be of the first order, one probably familiar with Canals, and the other with roads," He was sure James Geddes and his uncle would obtain these "as they are perhaps the most celebrated in these different departments." If his uncle declined he might have a chance; but he doubted this and began to hope for employment in Pennsylvania with the anticipated passage of a bill for internal improvements.⁶³ But circumstances turned in James Shriver's favor. Suddenly, his work with the map seemed to have its desired effect. Senators Samuel Smith and Henry Clay both personally thanked him for the publication, and he learned that his name was indeed well known because of it. He was surprised by the National Intelligencer's attention to it and more shocked when his father-in-law told him "he found the people in Kentucky Ohio Indiana & c. perfectly familiar with my name ... "64 He was even more surprised when a man wrote to him for a recommendation for a job, Since he was an "excellant common surveyor and a pretty good mathematician" and since only "engineers of established reputation" are usually asked, he was in high spirits, 65 He was now determined to return to Washington to lobby for one of the new positions; besides, his missing one of Pennsylvania's newly approved positions made this a necessity.66

A letter from Andrew Stewart notifying him that the canal bill had passed sent James Shriver scurrying to the capital. Stewart related that he had immediately called upon the President and Secretary of War and urged Shriver's appointment. ⁶⁷ When James arrived in Washington he found that Stewart had already prepared a recommendation for him with about fifty signatures includ-

ing Henry Clay and Andrew Jackson. With this in hand he and Stewart waited upon Secretary Calhoun, who related to him that he had a good chance for one of the civil engineering posts because of his excellent knowledge of the country. On May 17, 1824 James Shriver learned that he was appointed an assistant civil engineer to prepare the surveys for the Chesapeake and Ohio Canal, at a salary between \$1,200 and \$1,400 per year. His three year hiatus was finally over.

The General Survey Act of 1824 that provided employment for James Shriver was the result of years of debate, compromises, and experiments with the concept of Federal involvement in internal improvements. The problem was constitutional, whether the Federal government could be involved in state projects and private enterprises. The prevailing Congressional opinion at this time was that the government could furnish funds but could not directly control any of the projects. The problem was the method employed to select the projects, a problem solved with the creation of the Board of Engineers for Internal Improvements. The main members of this board were General Simon Bernard, Colonel Joseph G. Totten, and John L. Sullivan, a civil engineer. David Shriver, Jr. secured one of the secondary posts as civil engineer in charge of the civilian surveyors. James Shriver was one of the latter. ⁷⁰

The main activity of this important Board for the next two years was the preliminary surveys for the Chesapeake and Ohio Canal, for more than half of its appropriations were lavished on this project. In the summer of 1824 three brigades of surveyors were sent into the field. Two of these went into the Alleghenies and the other to the Potomac River Valley. Quite naturally James Shriver was sent in command of the Allegheny brigades since he had already considered the area as a route in his publication.

James left home in late May 1824 to commence the work which was then retarded by the gathering of equipment, the requisition of monies, the formation of his brigade, and poor weather. By early October of the same year Shriver was back home in Uniontown preparing his maps and full report. As he related in this report, the purpose of his work had been to procure a full ascertainment of the capacity of the Youghagany region in supplying the summit level with water... His great joy was that these surveys were more of an experimental, than of a conclusive nature, a fact assuring him employment for another season.

Shriver's elation over a brighter future was lessened by the death of his wife in January 1825. Much of his grief revolved about the added responsibilities of caring for his young son and daughter at the same time as his vocational responsibilities were particularly pressing. ⁷⁴ Fortunately, these nagging problems were erased as Andrew and Elizabeth Shriver stepped in to care for the youngsters. ⁷⁵ Andrew reassured his son that he was right to carry on his work:

I will then add that as Citizens of the World it is our duty to act our part well while placed here — we have all duties to perform, and we have only to apply ourselves *industriously* to What is *Manifestly* so, to regain tranquility and

peace of mind...look around your Country calls. Your friends have claims on you, and above all your Little ones require that you should be active in providing ways and means to their proper introduction to the world, that they may be fitted & prepared to act their part in it. 76

By April 1825 James had returned to the field and successfully completed his part of the preliminary surveys with the submission of his final report in January 1826.77

In his two-year employ on the Chesapeake and Ohio Canal project, Shriver exhibited a very different character from that of a decade before on the National Road. At no time did he hint that he was anything less than a professional. He convinced his father to allow him to train his younger brother Joseph in civil engineering. James employed him as one of his assistants and obviously trained him well, for in a few years Joseph replaced Jonathan Knight on the survey of the far northern portion of the National Road.78 Training others reflected Shriver's conviction that he had attained professional status. This was underscored when he released one of his men in 1824, stating, "I had some doubts whether your experience as a Surveyor was sufficient to enable you to perform your duties quite to my satisfaction."79 It was also revealed in his public letters to newspapers, most notably the National Intelligencer, which provided periodic reports on the progress of the canal surveys. These often digressed into descriptions of the natural scenery and history of the various regions. In one published letter of mid-1825 he described the subjection of nature to the systematic works of the engineer:

The country between the summit level and the mouth of Bear Creek, is a complication of mountain and valley, hill and hollow, exhibiting a system of an almost incomprehensible character, and presenting, to a mere superficial investigator, in many instances of an apparently insuperable nature; but it is found, upon the application of *instruments*, that these are only *apparent* and not *real* difficulties, and that, instead of its being so very complex, it is all simple and easily understood.⁸⁰

Shriver could not have written this a decade before.

Despite all this, in 1826 Shriver again faced the prospects of unemployment. He went to Washington at the end of 1825 to turn in his report, complete his maps, and look for a new position. Until the middle of January he labored at this work, in seclusion, ignoring the activities of Congress and his political acquaintances. At the end of the month he sought employment more seriously and hoped to obtain a position with the Federal government. At first, he sounded out various legislators about work on their state projects and used this as leverage in finding a better Federal job. He was again afraid that the Federally subsidized projects would soon be supervised only by the military engineers and was certain the final decision would not be made for months. "I feel my situation by no means pleasant, and nothing but dire necessity induces me to continue."

Shriver conducted as persistent a lobby in 1826 as he had a few years before, except now he was better known and more experienced in both engineer-

ing and politics. He learned while at dinner with Henry Clay, Colonel Totten, and some legislators that he had lost an opportunity to obtain a post in Georgia. Although disappointed by this, he also learned that he might be continued under the supervision of the Board and sent to Indiana for some preliminary surveys. ⁸³ A Virginia civil engineer encouraged him not to be despondent over these matters since there was both a growing demand for and scarcity of experienced civil engineers: "from N[orth] to S[outh] from E[ast] to W[est] your character and qualifications are known [and] your talents and experience as an Engineer will be sought after..." Shriver was continued under the Board and dispatched to Indiana.

Earlier in the year a Senate resolution had ordered surveys to determine the possibility of canal routes in the new state of Indiana. In late June Shriver led a brigade into Brookville in the southern portion of the state to begin this work. The importance of Shriver's work was underscored by a letter to him from the state's governor, James Brown Ray, congratulating him upon his arrival in the state:

You are the first regular Engineer, Sir, that has ever operated in this state; and you find us in the midst of a wilderness. By the time you shall have finished your labour with us, you will say that artificial aid is essential to our greatness, whilst you must admit that nature has been prodigal of her bounties and wise regulations.⁸⁵

Shriver unwittingly became the victim of politics. Governor Ray ordered him to the northern part of the state on the pretense that the Wabash-Maumee canal was more likely to receive both federal and state support. John Tipton, a political ally of the Governor, and owner of vast land tracts along the Wabash River, was influential in this decision, apparently hoping to benefit financially from the latter project. Tipton wrote at this time that he hoped Shriver would move directly to the Fort Wayne area, noting that "most of his expected surveys in the north look well enough on paper & were intended to answer certain political purposes..."86 There is no indication that James Shriver ever knew about these political connections, because when Ray and Tipton visited his camp he dutifully packed up and moved northward.87 The reason for this was that soon after his arrival in Indiana he fell ill. He first became sick at the end of July. The last entry in his diary is dated July 27 and reads: "Mr. Moore [Asa Moore, his assistant] continues the survey, became unwell last night took some medicine this morning - quite unwell all day." 88 By early August he was much worse. Moore wrote home that many of the surveying party were sick but that "James was the first who was taken ill and is now the worst on the list. He was taken about ten days ago at this place [Fort Wayne] with a bilious fever which has within the last day or so assumed rather a more serious form than we first anticipated."89 Three days later James Shriver died. Governor Ray eulogized: "A summons to leave the world has taken this competent engineer away, without allowing him to affect his purposes to any considerable extent."90

Governor Ray's eulogy remains a fitting summation of James Shriver's career. When Shriver died in 1826 he had not climbed far in the ranks of civil engineering. His task in Indiana was not of much greater importance than his earlier assistantship on the National Road. He never assumed any vital responsibilities, never devised any significant technological innovations, and never became a spokesman for more stringent professional standards in his field. His main success was in regaining an engineering position in 1824 after a three year absence. Though Shriver was a secondary civil engineer, he, and others like him, met a definite need. The leaders and innovators would have faced tremendous problems in carrying out their plans and projects without men like him. Shriver's career also reveals other factors important to the American civil engineer of this period — political and familial connections. It is not overstating the case to say that the success he achieved was as much the success of his father, Andrew Shriver, and uncle, David Shriver, Jr., as it was his own. Historians studying this subject need to consider these factors, as well as technological artifacts and vocational standards, as aspects of an increased professionalism.91

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Residential Growth and Stability in the Baltimore Industrial Community of Canton During the Late Nineteenth Century

D. RANDALL BEIRNE

Movement, and not persistence, describes the United States at the end of the nineteenth century. The accelerated growth of cities and the parallel development in transportation uprooted Americans at a greater rate than ever before. While most urban, working-class, residential communities in these cities succumbed to the process of invasion and succession, some resisted this change and remained relatively stable, closely knit communities from the midnineteenth century well into the twentieth. In his study of Philadelphia, Warner wrote that "rich and poor, factories and suburbs, still occupied in 1930 the same points on the compass as they had almost a century previous." In fact, that section of Philadelphia called the Northeast, "was the workers contribution to Philadelphia's popular reputation as a city of contented home owners and long settled neighborhoods."

Any number of social, economic and environmental factors might explain this condition. These factors range from bonds of ethnicity and kinship to high rates of home ownership and local employment linkages. It is argued here in this paper, however, that the complex influences of the local industries upon the adjacent community work force go beyond the influences of the other factors. This effort by an industry to restrict labor mobility out of a community by encouraging local residential persistence is called industrial linkage.

This condition was initiated when local industries of sizeable employment needs concentrated on the hiring of workers from families residing in the adjacent areas and undertook the provision of housing for these workers. Through paternalistic practices and welfare these industries were able to create the geographical and social framework for a community. The local factory, mill or plant was able to establish a strong community identity which, measured by residential stability, has persisted to this day.

Baltimore City has had a number of industrial neighborhoods that have persisted for over a century and even today show a high rate of residential stability. Baltimore is representative of many northeastern and northcentral American cities because of its mercantile and industrial economic bases and

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its heterogeneous mixture of European and black migrants. Some communities, such as Hampden-Woodberry, Canton and Locust Point are stable, working-class residential communities. The Canton area of Baltimore, which has been selected for intensive examination, grew primarily as the result of the activities of the Canton Company. This industrial developer not only furnished low cost housing to workers but also built docks, factories, warehouses and railroads in addition to recruiting labor throughout Europe for these same activities.

INDUSTRIAL LINKAGE IN THE UNITED STATES

The degree to which local industry has been able to control the economic and social life of a nearby community has varied greatly throughout the United States. The provision of company housing appears to be one of the stronger inducements for residential stability. Initial employment linkages often came about in the nineteenth century because shortages of local housing or physical separation from the city proper forced companies to provide adequate housing for their workers. Well into the twentieth century, many companies continued to provide housing along with other fringe benefits for their skilled workers in order to retain a stable work force. Some companies used housing to wield power over their employees against trade unionism. Pullman, Illinois, in the 1890's represents a company's attempt to thwart trade unionism by building a company town to satisfy and control its workers. Most company towns, however, grew more often from motivations of practical necessity and benevolent paternalism rather than of exploitation of the worker.

The reasons that workers accepted such paternalism and remained in an area were many, but the provision of low-cost housing by the mills was probably the most effective incentive. This practice of mill-owned or subsidized housing appears to have been quite widespread, particularly in the textile and steel industries. In Magnusson's federal survey of all company housing in 1916, over 34 percent of all men employed by the companies investigated were accommodated in company housing. This figure was probably lower than a decade earlier when in such places as the textile city of Fall River over 50 percent of the workers were living in mill owner housing.

Magnusson's study further revealed that management was not merely concerned with housing for industrial employees but also recognized that "a social responsibility rested upon them and that their attitudes and decisions were very influential in developing the character of the community." This social attitude was reinforced by fears of the possible power of the rising new labor unions, and it also encouraged management to expand their paternalism into welfare areas such as medical benefits, recreation facilities, improved working conditions, insurance, low-cost housing loans, and free schooling.

Industrial linkage crossed all ethnic lines in the urban neighborhood and as a result a form of provincialism developed. A study of nineteenth century textile workers in Cohoes, New York, revealed that each ethnic group had distinct work and marriage patterns that reflected its separate cultural back-

ground, but all were deeply integrated into a community which provided an avenue to social fulfillment and achievement.¹²

Some traditional industrial communities have persisted because clusters of different industries have been able to apportion economic activity among members of a family according to their varying abilities. Certain types of light industry took advantage of cheap female and child labor by locating near heavy industries dependent on male employment. A community with a diversified industrial base provides the basis for relatively high residential stability. A classic example of these multi-industry communities is Kensington, part of Philadelphia's Northeast, which by the early years of the twentieth century had grown into an enormous mill town.

Why the patterns of residential stability are not consistent from city to city is unclear. What is known is that islands of stability have existed in some cities and that the normal explanations of ethnicity, age, occupation, and income are not clearly conclusive. The tradition of paternalism, welfare work and segmental employment persisted. Understanding the causes of this working-class residential stability becomes much clearer when the concept of industrial linkage is included with other social explanations.

RESIDENTIAL PERSISTENCE IN CANTON

Although the chaos of periods, places, and methodologies among studies of residential mobility makes comparisons difficult, it is generally agreed that during the period of 1880-1930 a decennial population turnover of between 40 and 60 percent characterized most cities. With the one documented exception of Boston in the 1880s no more than, and usually considerably less than, 60 percent of the adult male population remained in a city for at least ten years. Moreover, among various broad occupational groups blue collar working men, skilled as well as laboring workers, generally exhibited higher decennial mobility rates than white collar workers.13 The Canton area within Baltimore appears to present a different experience (Table 1). Here the persistence rate in the 1880s was 75 percent. Superficially, this rate would place Canton high among urban examples. However, it is neither adjusted for death nor directly comparable to citywide rates. Both considerations must raise the figure relative to other urban experiences. Furthermore, the Canton sample was comprised of typically mobile blue collar workers and the 75 percent rate places it among the most stable examples of such occupational groups.¹⁴

Residential persistence has typically been measured by drawing a sample of adult males from census manuscripts and city directories and tracing individuals every ten years of their existence within the city over a fifty year period. If an individual is not found, he is considered mobile or deceased. Residential persistence means that the male remained within the Canton area (though not necessarily at the same residence) for at least ten years.

The persistence of Canton's residents over longer periods than ten years is remarkable. Two decades after the initiation date 49 percent of the males remained in the community, a phenomenon in marked contrast to the example of

Table 1.

Comparative Rates of Persistence, Canton, Oldtown, and Hampden and some Nineteenth Century Cities, 1880–1890

City or Community ^a	Percent of the residents at the beginning of the decade who remained at the end of the decade
Canton	the bas stands quade to see average and water bar
Boston	64
Hampden	63
Oldtown	54
San Francisco	50
Omaha	40
Mobile	38

Sources: Chudacoff 1972:92

Baltimore: Calculated from manuscript schedules of the U.S. Census 1880 and city directories from 1880 and 1890.

^aSamples were taken from only parts of Canton, Hampden and Oldtown. These samples were taken from dispersed inumeration districts and account for the following proportions of the study population: Canton—2/3, Hampden—1/3, Oldtown—1/5. Since many males in the Baltimore communities were too young in 1890 to be in the city directory, an adjusted figure was made by adding the names of these men if they were found to be living in the community in 1900. An assumption was made that none moved away before 1890 and returned by 1900.

Omaha with persistence rates of approximately 30 percent over similar 20 year periods. Moreover, after 30 years over one-third of the original sample remained, and finally 50 years later in 1930 one-fifth remained.¹⁵

The comparison of Canton to other communities in Baltimore reveals even more the remarkable residential stability of this community. The community of Hampden-Woodberry experienced a similar pattern of industrial linkage while the community of Oldtown, believed to typify heterogeneous central city neighborhoods, did not have similar employment linkage. Persistence rates in Hampden-Woodberry were similar to those of Canton while rates in Oldtown were considerably lower and similar to citywide examples of other cities (Table 2). The comparison of these three community persistence rates clearly encourages a closer examination of the industrial linkage concept.

Table 2.
Long-Term Persistence Rates for Hampden-Woodberry,
Canton, and Oldtown, 1880–1930

Cit	1880	Pe	ersistence Rate Sample in (pe		
Community Sample Number	1900	1910	1920	1930	
Hampden	978	46	32	27	20
Canton	442	49	36	30	21
Oldtown	447	29	20	14	5

Source: Manuscript Census, 1880, Population

CANTON AND THE CANTON COMPANY

Industrial development in Canton centered around the activities of the Canton Company, one of the oldest industrial development communities in the United States. Its principal founder was Peter Cooper, a New York capitalist and philanthropist, who in 1828 stated that he was drawn into the speculation with two other men, and that they bought "three thousand acres for \$105,000, taking the whole shore from Fells Point Dock for three miles." It was one of the very successful "humbugs of the era of 'corner lots in paper cities,' the stock having reached in 1834 the moderate price of \$280 per share for \$54 paid in." Heavy industry developed, and by 1872 most of modern Canton and Highlandtown was owned by the company (see Figure 1).

Between 1840 and 1870 control of the company passed to local citizens, and several new industrial plants established themselves on Canton Company property. The latter were both diverse and large scale, and most of them by 1873 employed a sizable work force. By 1873 the company owned 2,800 acres, comprising 18,000 building lots, graded and paved streets, water and gas facilities, and much valuable waterfront wharf property.¹⁷

Major industrial expansion took place in Canton after 1873, when the Union Railroad was built by the company to connect the rail lines from Philadelphia, Washington, and Harrisburg to the port facilities on the east side of Baltimore harbor. In a few years Canton was converted from a place of a few industries and breweries to one of grain elevators, rail yards, and heavy industry. Canton became a center for the canning and packing of oysters and fruit which by 1880 employed over 4,387 people in 34 establishments. 18 By 1890 Baltimore claimed to be the canning center of the east, with an enormous complex of related industries such as can, bottle, seal, label, and fertilizer manufacturing, all centered around Canton. 19 After 1910 the number of canning firms declined to 13, but the scale increased greatly, so that total employment (4.477) was slightly higher than in 1880.20 Among the major firms that developed during this period were the American Can Company, the Atlantic Can Company, Crown Cork and Seal Company, the Lazaretto Guano Works, and the Baugh Chemical Company. The overall packing-canning-fertilizer complex became a major economic asset to Baltimore, but to Canton it provided employment for much of its population.21

WELFARE WORK AND PATERNALISM

It was the Canton Company which established and fostered the growth of the Canton community. The industries which grew under the protective umbrella of the Canton Company practiced old fashioned welfare work and paternalism among the European-born workers in their midst much like that practiced in the textile industry by the mill owners. The company's major contribution to the local employees was probably the building and financing of local housing. As early as 1850 the company was in the residential building business. The Annual Report of the Can Company for that year states:

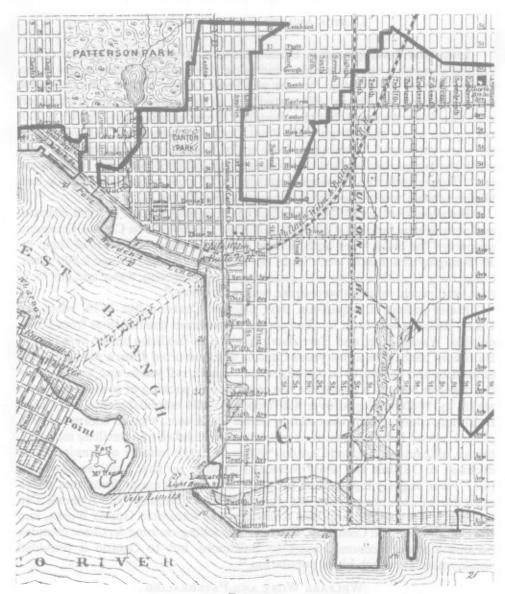


FIGURE 1.

The areas enclosed within the heavy line represent property owned by the Canton Company in 1872. The area covers almost the entire area of the present community of Canton plus most of Highlandtown and extends well into Baltimore County. From *Annual Report for 1872*, The Canton Company, 6 June 1872.

Four three and 63 two-story brick and 20 frame dwellings were built. These buildings were designed for and are mainly occupied by the artisans and laborers engaged in the various manufactories established on the Canton grounds.²²

For some of these houses the company was apparently the tenant, and employed the use of the ground rent to reduce the purchase cost. In this case the company retained ownership of the land but sold the housing structure.²³

After 1870 the company began a major program in neighborhood development. In 1871 they owned 19,000 building lots that were 20 feet by 100 feet each. These were sold off over the years to build the neighborhoods that now make up Southeast Baltimore. In 1912 The Annual Report stated that:

The parties who have purchased the eight blocks on Eastern Avenue in the vicinity of Thirteenth Street have recently purchased four additional blocks. They contemplate the construction of about six-hundred houses at once, seventy-six of which are now under the course of construction. This will add materially to supplying labor for the section which will make an additional attraction to manufacturers, and will create the development of a new neighborhood.²⁴

In addition to the Canton Company, other local industries furnished housing for the workers. In the 1850s the Baltimore and Cuba Company built a row of two-story brick houses, known locally as "Copper Row," on Clinton Street opposite the smelter. Later, other developers built dwellings on South Clinton Street almost to Lazaretto Point. Welsh copper workers settled along this street, and so dominated the neighborhood until the 1920s that it became known as "Welsh Row." This industrially linked ethnic neighborhood of company built housing remained until World War I, when 104 of these dwellings along Clinton Street were torn down to make room for a new terminal development.²⁵

Other forms of welfare work were also practiced in Canton. Most of this work was in the form of fringe benefits from the company management to its workers. For example, the Baltimore and Cuba Company allowed their workers to take home a wheelbarrow load of free coal once a week. In addition, the workers could take all the wood they wanted. At Christmas management presented each worker with a free turkey.²⁶

In addition to housing and various fringe benefits, the managers of the Canton Company and other local plants invested heavily in the community itself. The company contributed land and building supplies between 1865 and 1884 for the construction of a Presbyterian, a Roman Catholic, and two Methodist churches. In 1880 the company worked closely with the Park Commissioners of Baltimore in extending and improving the park facilities that stretched into Canton. Additional contributions to churches were made by the two owners of the iron mills, Horace Abbott and Joseph H. Stickney. In 1882 Abbott contributed \$15,000 to pay for the addition of a chapel to the Abbott church. Other local industrialists and entrepreneurs contributed almost \$6,000 to the same church to be partially used for the construction of a three-story brick parsonage. The same year the Canton Institute, a recreational facility for local workers, was established, and within the year had amassed a 1,300 book library and was sponsoring evening classes and concerts. The attitude of the local management was summed up as follows:

The directors of the companies manifested a true interest in the moral and educational welfare of their workers, and made generous concessions for the erection of school houses, churches, and healthy recreational facilities, believing that these operated to the improvement of their general character.³²

After the turn of the century fundamental changes occurred in the industrial structure of Canton. Some of the original firms, such as the Abbott Foundry and Rolling Mill, disappeared, and were replaced by new industries, like the American Can Company and the Crown, Cork and Seal Company. A number of the older industries, like the Baltimore and Cuba Copper Refinery, were purchased by non-local interests. By the 1920s only a few of the larger industries in the area, including the Canton Company, remained in local hands. As a result, the style of paternalism in the community was altered, and the personal relationships between employer and employee weakened steadily. Local leadership in welfare work shifted in the 1920s from the local management to the trade unions.³³ It was perhaps at this stage that the unions acted as a catalyst for the various ethnic communities and maintained the tradition of local industrial linkage. The unions developed in Canton primarily because of the large scale of industry, but also because of their power within the large national firms, of which local Canton industries were a part.³⁴

In Canton at the turn of the century the majority of the men were manual workers who were constantly subjected to the insecurity of labor in a free enterprise system. Most workers reached their maximum earnings early in life, and like most hourly-paid employees, were liable to be dismissed without notice and deprived of pay during sickness. They tended, therefore, to counter insecurity by a ready acceptance of managerial paternalism in return for their loyalty.

Job security was a particular problem throughout the United States after 1880, when the rise of machine technology adversely affected the skilled laborer and allowed the unskilled and semiskilled workers to play important roles in the production process. Trade unions began to grow at the turn of the century as a response to the increased size of the industrial proletariat, and acted as a counter to this insecurity. In Canton, as in many other industrial areas of the United States, the unions were hostile to the immigrant because of his passive acceptance of paternalism and welfare work by industrial management. The ensuing struggles between management and the unions tended to solidify and strengthen the bonds among the different ethnic groups. Such deep-lying bonds between members of a class who occupy a common geographical area become a cornerstone for building a stable community. The states of the union of the un

ETHNICITY AND FAMILY TRADITION

In Canton each ethnic group retained its own social orders and distinctive sets of values, as well as an identity with the community as a whole by developing a form of provincialism. This relationship seems to parallel that of the steel communities of South Chicago where, in the words of William Kornblum: "Ethnic segregation was limited by the more universalistic experiences of life

in rolling mills, blast furnaces, coke ovens, ore docks, and the switchyards." In South Chicago each new immigrant group had to assimilate aspects of its own culture with the overriding culture of the steel community. In contrast, the community provincialism and subservience to the larger industries apparently never developed in certain other ethnic communities in Baltimore and other cities. Each ethnic neighborhood remained as an island isolated to a degree from surrounding ethnic communities. No common economic unifying force appears to have existed.

It is clear that some of the enterprises in Canton, particularly the Canton Company, were instrumental in the evolution of these ethnic neighborhoods. As early as 1872 the Canton Company was recruiting in specific European countries, and the President, William G. Harrison, in his Annual Report, stated that:

During the past year your President, in accordance with the wish of the Directors, visited Europe for the purpose of influencing an immigration of mechanics, manufacturers, and skilled workmen to locate in Baltimore and settle on land of the Canton Company.⁴⁰

Agents of the company circulated literature on Canton in many of the large manufacturing towns of England, Scotland, and Ireland. Translated reports and handbills were circulated in Germany, Bavaria, Switzerland, Italy, France, Austria, and Belgium.⁴¹ Workers from Europe poured into Canton at such a rate that by the following year the company was experiencing problems:

Some corporate power other than now provided must be organized. This must be done either by organizing a city with municipal powers, or the Canton Company must obtain from the Legislature the right to regulate the police, health, and government of the said district of Baltimore County; or by a general movement of all the citizens of Baltimore County to seek to be reincorporated with the City of Baltimore.

As the various ethnic groups moved into Canton, they established their own neighborhoods, focusing upon industrial plants and churches. Because copper smelting was a Welsh craft, the first laborers in the Canton smelter in 1850 were Welshmen from Swansea. Initially they lived on "Copper Row" along Clinton Street, but by 1880 the colony had spread to Toone Street, 3rd Avenue (Conkling Street), and 5th Avenue (Holabird Avenue). Strong kinship ties among these Welsh copper workers and tradition encouraged many sons to follow their father's occupation; over 45 percent of the sons listed in the Federal Census of 1880 followed their fathers into the Canton smelter. In this strong ethnic tie to the skills of copper refining is illustrated by an analysis of the fathers of Canton copper workers, of whom in 1880 over 95 percent were Welsh born. Lee McCardell illustrates this close tie between kinship, ethnicity, occupation, and community in his 1940 interviews with "Daddy" Hughes and "Uncle Jim" Hopkins, the last of the Welsh copper workers in the community. Hughes went to work in the smelter at 14 in 1872

and remained for 52 years, while Hopkins started in 1864 at age 11 and served 66 years. Hopkins, of Welsh parentage, had a father and grandfather who were copper workers, as well as a mother who was the daughter of a copper worker. In the Hughes family the art of copper smelting was passed down to "Daddy" Hughes and his four brothers by his Welsh father. 46

The Germans and Irish settled in Canton during the latter part of the nineteenth century. In the case of both groups the institution of the church acted as the community focus. The Germans in Canton resided around the Sacred Heart of Jesus Catholic Church, the Methodist Episcopal Church, and the United Evangelical Church.⁴⁷ The Irish community gathered around St. Brigid's Catholic Church.⁴⁸ Evidence of German and Irish ethnic links to specific occupations tends to be general in nature. In 1880 in the Abbott Rolling Mill 37 percent of the workers were born in Germany, while 21 percent were Irish born.⁴⁹ While evidence is weak and scattered, it does suggest that some ethnic specialization of occupation existed.⁵⁰

The first Poles appeared in Canton about 1880, and by 1902 had concentrated around St. Casimir's Church. Apparently, they carried on the Canton tradition of home ownership, for by 1920 the East Baltimore Poles, most of whom were in Canton, could claim a population of "50,000 of Polish blood, 60 percent of whom owned their homes." This contrasted with a 1900 level of home ownership of 41 percent for Canton as a whole. The churches and to a limited degree the Canton Company helped some of the Polish loan companies build up their assets and thus provide money for home mortgages. The churches played a very strong role in this particular community. One inhabitant, when describing his own family experience in Canton, stated:

Being Polish and Catholic played an important role in my grandfather's family, because here religion was used as the security for the future. It gave meaning to his meager existence. The Catholic schools were more than an education because they gave cohesiveness and an identity to the neighborhood.⁵³

The institutionalization of ethnicity by industry is difficult both to identify and analyze. It can only be suggested that many of the necessary requirements for the process existed in Canton. The Canton Company recruited Europeans for the industries of Canton, brought them from Europe to Canton, and housed them primarily in their own ethnic neighborhoods. The local management of a number of the larger industries in Canton apparently was quite paternalistic, and contributed money and resources to these ethnic neighborhoods. Ethnically organized building and savings societies located in the Polish and German parishes enabled the residents to purchase many rows of six-room houses from the Canton Company, which still continued to hold the ground rents. This direct involvement by the Canton Company and certain industries in Canton in establishing the ethnic neighborhoods and the build-up of permanent communities may help to explain the higher levels of residential persistence.

FAMILY EMPLOYMENT

Canton had much in common with other Baltimore communities with respect to the form of family or segmental employment practiced during the period from 1880 to 1910. While the wives and children in Hampden were employed in the textile mills, in Canton they worked in the oyster and fruit packing houses and in the canning and pickling works. This type of labor was termed "family labor," and consisted of a mother and all her children working as a labor unit. Their earnings supplemented those of the husbands and often aided in the purchase of a house. ⁵⁶

The link between the family and the packing/canning industry in West Canton was especially close because of the tight concentration of the plants near the harbor. The residential locations of a sample of 273 workers in the industry, all of which were within one mile of the factories, serve to emphasize the close neighborhood ties to the local large-scale industries. In Canton local industries such as the Canton Company and the Baltimore and Cuba Company were larger and their hiring practices, for example, encouraged ethnic identity with specific industrial occupations. The tradition of sons assuming their fathers' occupation, as well as segmental employment practices, both supplement ethnicity. After 1900 the evidence of ethnic ties to specific skills in Canton is weak, but it appears that most of the ethnic traditions and practices linking them to local industry were developed prior to 1900 and, importantly, created an attitude which carried into the twentieth century.

CONCLUSION

In Canton, the same kinds of industries persisted well into the twentieth century. As the scales of these industries became larger during the late nine-teenth century and labor was recruited in Europe, management became directly involved in establishing ethnic communities near the factory sites. The single family home became the basic residential structure of each Canton neighborhood and rarely, did it become the work place for some form of service or home industry. From 1880 through 1930 work for most inhabitants was organized around a factory, located in most cases within the community itself.

In Canton place of residence and place of work were closely linked spatially well into the twentieth century. As late as 1925, 58 percent of the residents were working in the community.⁵⁷ Surnames in the contemporary city directories indicate that many of the 1925 residents were from the ethnic groups that occupied the area in 1880. Since neighborhoods did not change rapidly between 1880 and 1925, Canton remained relatively stable residentially, particularly in comparison with the general American urban experience.

The question arises as to the degree of persistence that actually resulted from ethnic solidarity. The evidence suggests that the merging of a number of ethnic neighborhoods into a solid social community by the Canton Company was in reality the major force behind residential stability. Another logical question concerns the continuity of industrial linkage in Canton after 1900,

when paternalism diminished as local firms were absorbed by national industrial conglomerates. The answers to these questions are not clear, and the evidence is inconclusive. The Canton Company until recently remained in local hands, and has continued to control much of the real estate, including ground rents on residential property.58

Canton was a community that provided labor from its ethnic neighborhoods for each of the local industries. Local employment became a tradition among many families, because the diversified economy provided employment for many members of each family. As a consequence, job continuity was possible within the local community without changing residence. The degree to which trade unions in Canton in the late nineteenth and early twentieth centuries replaced management's role in welfare work is not clear. An analysis of labor's role in other cities at that time, however, implies that they probably followed the same patterns in Baltimore and became involved in welfare work, 59

The residential stability of Canton from 1880 to 1930 can be attributed to a variety of factors acting individually and in unison, depending upon the decade; namely, paternalism, ethnicity, the family, and employment in the local community. When large scale industry plays a minor role, as in the Oldtown area of Baltimore, the forces of linkage are limited, and tend to reflect lower rates of residential persistence. The key to the relationship between industrial linkage and residential stability appears to be the scale of the local industry and the attitudes of local management.

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Jewish Occupational Roots In Baltimore at the Turn of the Century

LAURAINE LEVY KARTMAN

Grandpa, Max Levy, was an immigrant from Poland. He was a tailor whose shop was at 630 W. Fayette from 1899 to 1920. From 1912 to 1920 he lived at 705 W. Lexington near Pine. This was in ward 4 which had a majority of Russian foreign-born whites. Grandpa used to scrub suits in his backyard and mend and press them for customers. He was Orthodox (adherence to traditional Judaism) and a deeply religious man. This was also manifested by him stopping from his labors at the appropriate times to recite the prayers. Once a man came for his suit on Saturday, and grandpa refused to give it to him then, saying he did not do business on Shabbos. The man took grandpa Levy to court, but the judge honored his religious beliefs and decided in his favor.

The other outstanding thing about this man and people like him from the immigrant population was the value they placed on educating their children. Once grandfather Levy was pressing a suit with a heavy iron when a wealthy banker walked in. The banker said, "Why don't you get your sons to leave school and help you?" Grandpa lifted the heavy iron and replied, "If I have to use this iron for the rest of my life, my children will get an education!" His two sons grew up to be an internist, Dr. Isidore Levy, and a Professor of Romance Languages, Dr. Raphael Levy. The two daughters grew up to be a social worker, Mrs. Flora Wallace, and a schoolteacher, Mrs. Yetta Shank.

This man, Max Levy, was like many Jewish immigrants who came to Baltimore and other American cities. Irving Howe writes,

All through the late nineteenth and early twentieth century, learning came to seem an almost magical solution for the Jews, a people that has always placed an enormous faith in the sheer power of words. Learning in its own right, learning for the sake of future generations, learning for the social revolution, learning in behalf of self-discovery.

From the most humble occupational roots, the Jewish immigrants struggled so that their children could have a better life through education. Parents would attain fulfillment through their children.

Because of an interest in Jewish roots, one day last summer this writer walked into the Jewish Historical Society and asked Dr. Aberbach, the cura-

Lauraine Levy Kartman is a social worker, granddaughter of the late Max Levy, an immigrant tailor, and dedicates this work to the memory of her father, Dr. Isidore I. Levy.

tor, if he had any interesting projects to work on. As a second generation American Jew this writer was interested in learning more about a fascinating ethnic heritage. Dr. Aberbach suggested that trying to identify the occupations of Jewish immigrants in Baltimore around the turn of the century would be constructive. Since grandpa had been part of this group, the project was appealing. It was like going back in a time capsule which transported this researcher to the era of immigrant grandparents. A whole world that is now gone—the poverty-stricken Polish-Russian community of Baltimore—was opened through the fascinating documents held by the Jewish Historical Society.

The two sources used to identify Jewish occupations in East Baltimore were a Workmen's Circle Insurance Ledger Book for 1911 through 1916 and a local midwife's records covering the period from 1895 through 1914. One hundred and thirty-three occupations were tabulated from the Workmen's Circle Book including occupations of working women. On the other hand, the midwife, Rosa Fineberg, identified parents' country of origin in her record keeping. Excluding non-Jewish births (27), 1226 of the father's occupations and countries of origin were tabulated along with pertinent demographic data.

The midwife's records reveal the high proportion of Polish and especially Russian immigrants in East Baltimore:

1165 - both spouses from Russia

37 - one spouse Russian, other spouse, different country of origin

8 - both spouses from Rumania

8 — both spouses from U.S.

3- both spouses from Galicia

3 — both spouses from Austria

2- one spouse German and the other spouse American

1226 - Total

The high proportion of Russian immigrants is somewhat misleading. During the eighteenth century Poland was partitioned and its eastern territories were incorporated into the Russian empire. Following the Napoleonic wars, Central Poland also fell under Russian rule but was allowed to maintain a quasi-autonomous state. The province of Galicia was annexed by Austria in 1772. The high tally of Russian immigrants, therefore, included those whose origins were Polish, except Galicia.

From the total population of midwife's records and Workmen's Circle Insurance Ledger Book, a ten per cent sample was analyzed according to the section of Baltimore where they lived before 1900. The midwife, Rosa Fineberg, lived at 27 Lloyd Street from 1894 to 1895. From 1896 to 1901 she lived next door at 25 Lloyd Street. She moved to 1106 E. Lombard Street in 1902 and moved again in 1918 to 1125 E. Lombard Street. Because these addresses were all in East Baltimore, her activities were probably in this geographic area.

Most of the ten per cent sample of addresses which were extracted from the midwife records were spelled phonetically which suggests that Rosa Fineberg was a newly arrived immigrant herself. Of the 133 addresses, 34 streets could not be located due to misspelling, but the balance of 99 streets were all located in East Baltimore. According to the 1896 Bromley Atlas of Baltimore, the streets lay in wards 1 and 5.

An overview of these old wards 1 and 5 in East Baltimore show a colorful composite of foreign born whites. The 1910 Census of the United States shows:

1910 CENSUS OF THE UNITED STATES (BALTIMORE CITY)

Country of Origin	Ward 1	Ward 5
Austria	511	146
Canada	15	14
England	57	163
France	5	8 Two In the Investor
Germany	2451	406
Greece	19	37
Hungary	56	43
Ireland	225	129
Italy	30	959
Norway	30	1
Rumania	4	44
Russia	449	4952
Scotland	12	16
Sweden	22	3
Switzerland	7	10
Other foreign countries	48	28

Though some of the Jewish population sampled in the survey were clustered in wards 1 and 5, the total foreign born whites in that area were heavily German and Russian. In 1910, the majority of Russian foreign born whites were in wards 3, 4, 5, and 6.

MIDWIFE'S RECORDS

Rosa Fineberg undoubtedly served a wide cross section of the East Baltimore Jewish immigrant community. Except for complicated cases, few women went to the hospital for delivery around the turn of the century. Though the original Sinai Hospital was completed in 1868 (then called Hebrew Hospital and Sheltering Home) it was used exclusively for the indigent in the early days. The hospital's role in delivering babies born to this community was small. In fact, as late as 1935 throughout the United States, only 37 per cent of all births occurred in hospitals; in 1948 the figure was 86 per cent.

Thanks to Rosa Fineberg, the father's occupation was written in all her midwife birth records. The following is a breakdown of occupations in East Baltimore neighborhoods:²

Clothing	Number
Button Hole Maker	2
Capmaker	34
Cutter	11
Hat Maker	1

Machinist	6
Presser	107
Shoemaker	38
Tailor	540
Woolpicker	2
Total	741

Food and Beverage (excluding storekeepers even though they could be in food and beveage)

11

Baker	13
Bartender/Saloonkeeper	23
Bottler	2
Butcher	6
Dairy Business/Milkman	6
Farmer	4
Grocer Dealer	11
Restaurant Worker	1
Total	66
Business and Professional	
Upper Strata	
Bookkeeper	4
Clerk	9
Druggist	3
Photographer	1
Rabbi/Reverend	13
Real Estate Broker	2
Stock Clerk	1
Stockholder	1
Storekeeper	86
Teacher/Rebbe	11
Undertaker	2
Watchmaker/Jewelry	9
Total	142
Middle Strata	
Bookseller/Bookbinder	2
Merchant	1
Salesman	3
State Business	2
Total	8
Lower Strata	
Dealer	2
Huckster	1

Junk Dealer/Cutlery Dealer

Peddler	41	
Street Laborer	1	
Total	56	
Furniture Trade		
Cabinetmaker	2	
Carpenter	32	
Furniture Dealer	2	
Furniture Polisher	1	
Polsterer/Upholsterer	2	
Total	39	
Total	39	
Transportation		
Conductor	1	
Driver	5	
Expressman	13	
Ice Man	2	
Milkman	1	
Total	22	
Total	22	
Artists		
Actor	1	
Musician	6	
Sculptor	1	
Total	8	
Miscellaneous		
Barber	7	
Ballmaker	1	
Blacksmith	6	
Brushmaker	1	
Cigar Maker	21	
Coal Yard Worker	2	
Collector	2	
Cupper	1	
Lamplighter	1	
Packer	1	
Parlor	23	
Tinner	5	
Umbrella Mender	2	
Total	73	
Building Industry		
Bricklayer	1	
Builder	1	
Glassworker	1	
Mason	1	
Painter	38	

Paperhanger	5
Plumber	24
Total	71

In summarizing the totals by occupational category, the following pattern emerges:

	Number	Percentage of Total
Clothing	741	60
Food and Beverage	66	5
Business and Professional		
Upper Strata	142	12
Middle Strata	8	1
Lower Strata	56	4
Furniture Trade	39	3
Transportation	22	2
Artists	8	1
Miscellaneous	73	6
Building Industry	71	6
Grand Total	1226	100

Also, the trades with the highest numbers can be readily discerned:

	Number	
Tailors	540	
Pressers	107	
Storekeepers	86	
Peddlars	41	
Painters	38	
Shoemakers	38	
Capmakers	34	
Carpenters	32	
Bartenders/Saloonkeepers	23	
Parlor	23	
Cigar Makers	21	
Total	983	(or 80 percent of the total sample, 1226)

WORKMEN'S CIRCLE INSURANCE LEDGER BOOK

The second source for occupational differentials was a Baltimore Workmen's Circle Insurance Ledger Book covering the period from 1911 through 1916. The Workmen's Circle was a fraternal order which provided its members with medical and dental care, low cost hospitalization, life insurance, disability benefits, tuberculosis benefits, old age assistance, and funeral and burial benefits. The first to be organized in Baltimore was Branch No. 9 of the national Workmen's Circle, which was formed in 1898 from an existing Men's Progressive Club. Like other Jewish organizations in the city, it met in rented rooms before buying a home at Aisquith and Lexington Streets, later known as Pro-

gressive Labor Lyceum. The organization established a library of Yiddish and Russian books which was very popular, especially with young people. Typically the Workmen's Circle arranged lectures, debates, and concerts. During the 1920s it also maintained a children's school. It was Baltimore's only secular school conducted in Yiddish.³

The following is the breakdown of occupations, of both men and women, from the Workmen's Circle Insurance Ledger Book:

Clothing		Number
Backer		2
Cap Maker		1
Cape Maker		1
Cloak Presser		5
Coat Presser		1
Cloth Sponger		1
Cutter		2
Furrier		1
Millinery		1
Pants Cutter		2
Pants Presser		3
Presser		2
Shirt Waist Cutter		1
Shoemaker		1
Tailor		36
Ladies Tailor		6
Merchant Tailor		1 57
Vestmaker		4
Cloakmaker		9
Button Hole Maker		1
Total		81
Food and Beverage		
Grocer		4
Business and Professions	al	
Upper Strata		
Dental Technician		1
Druggist		1
Physician		2
Practical Nurse		1
Watchmaker		1
Total		6
Middle Strata		
Lithographer		1
Merchant		9
Photographer		1
Total		11
10001		11

Furniture Trade	
Carpenter	15
Upholsterer	1
Total	16
Transportation	
Driver	1
Miscellaneous	
Barber	1
Chest Ironmetal Worker	1
	9
Cigarmaker	_
Flower Maker	1
Total	12
Building Industry	
Plasterer	1
Stone Cutter	1
Total	2

In summarizing the totals by occupational category, the following pattern emerges:

CL 41	Number	Percentage of Total
Clothing	81	61
Food and Beverage	4	3
Business and Professional		
Upper Strata	6	5
Middle Strata	11	8
Furniture Trade	16	12
Transportation	1	0
Miscellaneous	12	9
Building Industry	2	2
Grand Total	133	100

It is significant that the occupation with the highest number embraced several types of tailors. They totaled 57 (of the sample of 133) or 43 per cent. The Workmen's Circle was founded by Jewish trade unionists who were concentrated in the clothing trades, but it is apparent that many other Jewish workers joined the organization. Compared to the midwife sample, however, the Workmen's Circle included a much more narrow group. The midwife records list seventy-one different occupations for 1226 fathers while the Workmen's Circle lists only thirty-seven. If one tallies the occupations outside the clothing trades the figures are sixty-two for the midwife and eighteen for the Workmen's Circle.

Women were also included in the Workmen's Circle Insurance Ledger Book. The majority were housewives and were excluded from the tabulation of occupations. The number of employed females in the ledger book numbered only seven. Five females were in clothing (2 tailors, 1 cloak maker, 1 buttonhole maker, 1 in millinery), one was a flower maker and another a practical nurse.

Helpful in understanding the role of Jewish women in the labor force, was an illuminating review in 1903 of Dr. Willett's book, Women in The Clothing Trade, in the Baltimore English language newspaper, The Jewish Comment. The Jewish Comment said,

Miss Willett pays a high tribute to the Jewish character. She says that married Jewish women seldom work in factories, and that the male worker does not fear competition of women, because of his superior skills and adroitness. Jewish women usually confined themselves to the unskilled stages of manufacturing clothing. Here they are underbid by the Italian women and are rapidly being removed from the factories. Miss Willett notes the thrift, ambition, and perserverence of the Jewish character. Many Jews are "home workers."

Later, in 1907, *The Jewish Comment* quotes another women writer, Francis Heller, who said that the home ties of the Jews are proverbially strong and that the difference in food and its preparation is an obstacle to Jewish women working as domestics in a non-ritually-observant home. Mrs. Heller makes clear that immigrant women are transient workers, giving as reasons in the case of Jewish girls their preference for home and early marriage.

Here again, through analysis of occupations listed in the Workmen's Circle Insurance Ledger Book, one can see how Jewish roots were planted in Bal-

timore around the turn of the century.

Also of interest was learning how many Jewish immigrants moved up in the occupational scale and how many stayed in their old neighborhood. The case of grandfather Levy might perhaps be indicative that most of the original immigrants remained in the same occupational strata through their entire working life. While there is not enough available information to give a firm answer, this writer did gain an insight into the general picture.

Twenty-five males registered in 1911 and 1912 from the Workmen's Circle Insurance Ledger Book were followed for approximately thirty years to learn their occupational mobility as well as their geographic mobility. Unfortunately, fifteen of the sample could not be located because they chose the same names, moved outside Baltimore, or died. However, certain patterns distinguish the ten males who could be followed through the Polk City Directories of Baltimore.

With respect to geographic mobility, all ten males in 1911–1912 lived in East Baltimore. By 1925, half had moved to Northwest Baltimore and by 1940, 80 per cent of the original sample were still living in Northwest Baltimore. This writer's own childhood experience of living in Northwest Baltimore concurs with the mobility trend in this geographic area.

Mobility in occupations was rare for six males remained tailors through 1940, and one remained a carpenter through 1940. One man was a "jack of all trades" and earned a livelihood first as cigarmaker, then as collector, and by 1930 as doing radio repairs. One man started out as a tailor and by 1940 owned

a mill and lumber company. In spite of these two clear successes, upward mobility in occupations for the original East Baltimore Jewish immigrants was fulfilled through the next generation.

In conclusion, the Jewish ethnic community located in East Baltimore around the turn of the century had certain shared values. While mostly in the lower socio-economic strata, they shared the same American dream of making something better out of their lives. But mainly they struggled to provide their children with a "better" life, an education, and to live in freedom.

The Jewish immigrant had perspicacity and fortitude to build roots in America. This represents a truly creative life, these early pioneers in East Baltimore, the tailor, the presser, the shoemaker, all those who struggled with vision. These people are the strong roots of the American dream. Their worth is priceless.

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Green Mount: The Introduction of the Rural Cemetery Into Baltimore

R. KENT LANCASTER

Boston's Mount Auburn was America's first urban "rural cemetery." Conceived in 1825 and dedicated six years later, it rapidly became one of the most popular attractions in the area. A careful blending of nature, art and death, Mount Auburn was designed to be a cultural institution as well as a burial place — an uplifter of morals and a teacher of history, an institution to which Bostonians could point with pride as a symbol of their sophistication. Boston's concept of a rural cemetery captured the imagination of Americans and set the style of American burial for the rest of the nineteenth century. Philadelphia opened Laurel Hill in 1836, and scores of other cities rushed to produce their own adaptations of Mount Auburn. Baltimore's version was the third dedicated in the country according to Baltimore sources, although Brooklyn and others have disputed that ordering.

Samuel D. Walker, a Gay Street tobacco merchant, introduced the rural cemetery to Baltimore about 1834. Deeply impressed by a visit to Mount Auburn, Walker wrote to the newspapers, spoke to citizens' groups, and finally circulated a pamphlet urging that his city emulate Boston and provide itself with a proper place of sepulture. Tracing Mount Auburn's development and citing its enormous success, at least in spectator appeal, he demanded, "Who visits Boston without going to Mount Auburn?"

Warning of the encroachment of "progress" across urban burial grounds that had seemed isolated and adequate when they were established, Walker's evidence was specific to a Baltimore not too old for some of the living to have known most of the dead:

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the church, and the beautiful houses erected on Charles-st., are upon the site of St. Paul's burial ground; Plesant-st. runs over the old Lutheran Grave yard; Dr. Birckhead's house and those adjoining are erected upon that of St. Peter's; the dead have been removed from the ground connected with the Drunkard's sanctuary; the Shot Tower, like a monumental pyramid, rises over the ruins of the old Baptist cemetery; and the Methodist Society, have only been prevented from alienating their place of inhumation in Eutaw st., in consequence of the donor having reserved it in fee, without condition, as a place of sepulture.

The dead had leased, but did not own, their cubic footage, so their ''last resting places'' were often not quite the last as the city expanded. A rural cemetery, properly chartered, offered ownership and permanence so that "families might... save the venerated bones of their relatives the insult of wanton and unfeeling disinhumation.'' Reflecting, rhetorically at least, the era of the common man, Walker envisaged a great democratic burial ground which would "bring together the ashes of the illustrious and the humble." Finally, the tobacco merchant-turned-promoter promised an ecumenical cemetery, free from the congestion and parochialism of the little church graveyard, indeed a wedding of nature and art with all Christians lying together, sectarian differences erased.

Walker's appeals succeeded, for in a short time a group of business and professional men had organized to draw up plans for Baltimore's rural cemetery. The site selected on the northern boundary of the city was Green Mount, one of the country estates of the late merchant prince, Robert Oliver. Oliver's heirs and executors agreed to sell some sixty acres to the developers for \$65,000.5 The estate was a hilly one with a long plateau running diagonally across the property from the Oliver mansion, a fairly plain old house embellished with an ornate neo-classical west-front. "Oliver's Walk," a rustic path edged with elms, circled the plateau. The view was largely unemcumbered by evidences of man except up the picturesque Jones Falls and off to the south, where Mills' new Washington Monument and Latrobe's cathedral were visible. The site was remote from activity and yet accessible; it was large enough to accommodate the city's dead for as long as one could imagine; and it offered a location of unusual natural beauty.6

The state legislature acted on March 15, 1838, to incorporate the Green Mount Cemetery and to provide for a Board of Proprietors, to consist temporarily of the developers, who included Walker, three other merchants, a manufacturer, a printer-publisher, and a lawyer. An early amendment to the act provided that when the debt for the land was paid off, receipts of the non-profit corporation should be divided into five parts, with two-fifths allocated for cemetery expenses, one-fifth for the common schools of Baltimore, one-fifth for Sunday schools, and one-fifth for the establishment of a seamen's institute and an apprentices' library. A subsequent amendment in 1840 repealed the allocation to common schools and directed those funds to promoting the cause of temperance. The cemetery was to be immune from the penetration of streets or alleys and was to be tax exempt; plots were to be sold as real estate in fee simple. Real ownership was thus to devolve individually on each of thousands of

plot owners and not on a single legal body. Condemnation proceedings in the cause of progress or any other disposition of the property were to be virtually impossible.⁷

The Proprietors of Green Mount invited the public to dedication ceremonies on July 13, 1839, and the Baltimore Sun reported that as soon as the gates were opened, hundreds began to stream in. Seats were reserved for the "reverend clergy" and members of the city council, and the public was given notice that forces would be on hand to preserve the decorum necessary to the occasion and place. Decorum had already been stressed by the Proprietors, who forbade entry into the cemetery of "boys without their parents or of females unless accompanied by gentlemen." Dogs, cigar smoking and visitors on horseback were also prohibited.

The dedication ceremony began with music and an invocation by the Reverend Mr. William Wyatt, rector of St. Paul's in town, and included anthems written for the occasion by Francis H. Davidge and J. H. B. Latrobe. The central attraction, however, was the address by John Pendleton Kennedy, author, Congressman, and popular orator. Kennedy understood his commission perfectly, and it seems unlikely that the promoters could have quibbled over any single phrase or nuance in his forty-five minute speech. He introduced every theme that had led to success at Mount Auburn and Laurel Hill, and developing each, according to the *Sun*, with "glowing eloquence and thrilling pathos," was "listened to with profound attention and evident delight by the auditory."

Although too polished to make unpleasant comparisons between Baltimore and Boeotia, Kennedy nonetheless covered with real virtuosity the whole spectrum of appeals and arguments that Walker, and others in Boston and Philadelphia, had developed for rural cemeteries. He began with a reinterpretation of death, a reinterpretation already becoming familiar to many and necessary to the arguments for more gracious sepulture. Death was no longer the destroyer, dreaded and feared, whose victims were to be buried and forgotten quickly as reminders of human frailty. Death had become, in fact, "the patron of posterity — the great provider for the present . . . Those who follow us," Kennedy suggested, "will thank death for their turn on earth," and he exhorted men to dwell, not with fear, but "with calm and even pleasurable meditation on the change which nature's great ordinance has decreed."

Urban cemeteries, "overcrowded, ponderous, gloomy, and within prison-shaped walls... with rusty, creaking iron gates," had robbed death of its dignity; their physical unpleasantness had led to neglect of the care of the dead. Nor was there anything there "to stop the traveller and wring a sigh from his bosom, unless it be to find mortality so cheaply dealt with in those uncheery solitudes." Remembering, perhaps, that he shared the platform with the Reverend Mr. Wyatt, whose parish graveyard was of the old sort, Kennedy noted that Baltimore had better cemeteries than he had described, although their differences were in degree alone.

Having disposed effectively of urban sepulture and made a friend of death, Kennedy moved on to another central theme, a concomitant of the naturalness of death — nature as the natural home of the dead. "Give me back," he pled,

"the space, the quiet, the simple beauty and natural repose of the country." Death was a part of nature — decaying leaves made the next generation of leaves greener. Man could repose with dignity among the cycles of nature. "That rural adornment," he argued, "so appropriate to the dwellings of the dead, [is] so appropriate because [it is] so pure and natural — the deep shade, the verdant turf, the flower-enamelled bank...the hum of bees and carol of summer birds." A friendly death and a natural setting worthy of every paean in the Romantic vocabulary had been joined to dignify the last stage in the human progress.

Moving on to another major theme, Kennedy extolled the cemetery as an invaluable instructor of morals and history. The living, he urged, "may find in it a treasure of wholesome instruction," for "this mute scene would teach with an eloquence passing human utterance.... Hither in levity would stray many a careless footstep, but not in levity depart. The chance-caught warning of the tomb would attemper the mind to a sober tone of virtue, and long afterward linger on the memory." Here, too, would abide the great and the humble of the city side by side, providing for coming generation a many-dimensional history of their city.

In a final appeal to local pride, Kennedy evoked Mount Auburn and Laurel Hill, "the most attractive objects to the research of the visitor in the environs of the cities to which they belong." Green Mount compared advantageously with both, for it was more accessible than the former, more spacious than the latter, and "in scenery, at least equal to either."

Having exhausted his forty-five minutes, if not his store of eloquence, Kennedy closed with a passage from William Cullen Bryant's "Thanotopsis." After a heady hour of prayer, anthems and oratory, no one, apparently, noticed that the death in the poem he quoted was the outdated and terrible reaper, not the benign and natural death of the rural cemetery. Kennedy, at any rate, had presented Green Mount with pomp and dignity to its potential patrons, and had, in fact, described the type of cemetery that most of those Baltimoreans who could afford it would choose for the next sixty years at least. 10

Although Green Mount had been established legally and launched ceremonially, some nervousness was apparent in the beginning about its financial future. At least six hundred fifty plots had to be sold simply to cover the purchase price of the land, and the Proprietors had incurred other debts as well, for interest and for costs of surveying and mapping the land, for the new gate, the wall, roads and walks, and the mausoleum. The Proprietors proposed rather optimistically in 1839 that five hundred citizens purchase four plots each, keeping them or reselling them as they chose. 11 Although this scheme to dispose very quickly of 2000 plots failed, the first report of sales in Green Mount, published within a year of the dedication, suggests that the response to the promotion campaign was fairly enthusiastic. By that time, 396 buyers had purchased at least 685 plots; sixty-three of these buyers had acquired four or five plots each, eighty-seven two or more plots, and 181 a single one. Sixty-five others had subscribed but not yet selected their plots. 12

The buyers of multiple plots were motivated by a variety of concerns. Some simply wanted to establish room for family burial through the generations: the McKim brothers in Section I, the Whitridges in Q, and the Farnandises in G are examples. Generations of family members were gathered within the wrought-iron fences that enclose their four-plot lots. Others either responded to the appeal of the Proprietors for multiple purchases or simply speculated; their purchases were sometimes in a block, but more often scattered here and there along Oliver's Walk. Some reserved one or two plots for the family and sold the others, and for some it is apparent that dynastic failure or some other stroke of fortune simply determined that the purchaser had overextended.

Recent studies in necrogeography have shown that the typical pattern of interment in this period was for the affluent and the elite to claim the prime space, usually on the hill, and for the humbler to move naturally into sites down the slope or in the lowlands. 13 The broad expanse of the Green Mount plateau worked against such a pattern, and there were few signs in the cemetery's first half-century of any elitist clustering. The whole of the plateau had been surveyed by 1840 and divided into twenty-three lettered sections, which were subdivided into plots at least sixteen by twenty feet. Serpentine roads and paths had been laid out to complement the elm-shaded oval of Oliver's Walk. Nineteen of the sections touched the Walk and others were in close proximity to it. The rush in Green Mount was not to any clustering by class or status or to the isolated sylvan glades extolled by Kennedy and other promoters. The rush was to Oliver's Walk.14 The Walk had already become the major thoroughfare in the cemetery and would continue to be as long as society was not motorized. Proximity to the living was apparently more important to the early subscribers than isolation in natural solitude. Kennedy's own choice shows some ambivalence; with a view to the north that must have been splendidly pastoral in 1840, he was still comfortably close to the Walk, where people moved back and forth to visit, to enquire, and occasionally to picnic in his day. There are numerous small clusterings, by trade or profession or of neighbors, in the cemetery, but the land around Oliver's Walk contains a remarkably heterogeneous cross section of those Baltimoreans able to produce \$100 for a plot.15

Of the 396 original subscribers to Green Mount, 386 can be identified from contemporary city directories, at least as to occupation, address and place of business. The one characteristic subscribers had in common, apart from being able to pay for a plot, was affluence enough to be a "householder," for such was necessary for inclusion in the directories at the time. The second most common characteristic was residence in the city, for no canvassing was undertaken outside the city limits. A single subscriber is described as "farmer," and his is the only occupation among the subscribers not bound up in some way with commerce or with urban living. ¹⁶

The first list of subscribers also reflected Baltimore's mercantile character, for more than half are identifiable as merchants. The one line entries in city

directories permit few distinctions and one may find an Enoch Pratt or a Johns Hopkins listed under the same designation as a hotel tobacconist. A distinction, however, is made between "merchant" and "commission merchant," and although that distinction is not consistent throughout subsequent directories, it is clear that the commission merchant enjoyed a measure of prestige. Commission merchants made up about twelve percent of the original subscribers. Another forty-three percent were simply designated merchants, retailers and wholesalers, many of whose commodities are noted in the directories. Among these, dry goods retailers were the most numerous, followed by grocers, importers of various wares, tobacco, hardware and flour merchants, druggists and merchant tailors. A host of other retailers and wholesalers were represented, their goods ranging from wrought iron to pianos and fruit. The developers had canvassed the commercial areas of the city most carefully. Baltimore Street provided scores of subscribers and Pratt, Lombard, South Charles, Fayette, and Gay Streets and the wharves were heavily represented.

The second largest group of subscribers were forty-seven professional men — doctors, attorneys, bankers, insurance executives, and such — followed by thirty-three manufacturers, who produced everything from candles to steam engines. Twenty-one purchasers were in sea-related work, including joiners, riggers, a harbor master and eight sea captains. Twenty were in building crafts — carpenters, bricklayers, painters, and the like — and fourteen in other crafts and trades. Ten were employed in hotel, storage or transport enterprises and nine were simply clerks. A final group of nine miscellaneous occupations included the proprietor of a laboratory, the farmer, and several lottery employees.

As might be expected of those who bought four or more plots, merchants were most heavily represented, with thirty-seven merchants, eight from the professions, six manufacturers, a sea captain, two from the building trades, two clerks, the laboratory owner and three who cannot be identified among the larger purchasers. Six of the seven commission merchants who purchased four or more plots retained them for family use, as did seven merchants, four from the professions, two manufacturers, a bank clerk and a carpenter. Although the last-named would seem to suggest some heterogeneity among those buying four plots, this was no ordinary carpenter. He was, indeed, in spite of his designation in city directories, an important builder, whose family moved up into top-level manufacturing and mercantile circles. Few without real substance were able to invest \$400 in a family plot.

The Proprietors, meanwhile, had begun the task of turning a country estate into a rural cemetery. The Oliver mansion was to serve temporarily as a chapel, but other components of a cemetery were needed. A wall to surround the property was begun of Baltimore County and Port Deposit stone, and an entranceway, vaults and other things had to be planned. By 1838, the Proprietors had designated Robert Cary Long, Jr. architect of the cemetery. Long had come to Baltimore after studying in New York, and about 1834 began to take over the unfinished architectural commissions of his recently deceased father. Until 1848, when he moved to New York, he was to be Baltimore's premier ar-

chitect, designing, among other existing buildings, St. Alphonsus' Church, The Franklin Street Presbyterian Church, and the Lloyd Street Synagogue. Long played an important part in Green Mount's early years. He prepared two designs for the entrance gate, one Egyptian, the other Tudor. The Tudor design was accepted and the gateway presides over commuter traffic on Greenmount Avenue today. Its central archway for wheeled traffic is flanked on each side by an octagonal tower, an archway for pedestrians, and a two-story cottage, one of which housed the gatekeeper, the other providing reception rooms. The gateway was completed by 1840 with only the iron gates still to be hung.¹⁷

About the same time, Long was charged with producing a plan for an above-ground vault entrance for use on level plots. He was also the architect of the public mausoleum, a twenty-eight by twenty-two foot building "in the Egyptian style," which stood until 1929 on the site of the present mausoleum. He designed the crypt-entrance monument for the Oliver family vault, which was to receive Oliver's remains when they were brought back to Green Mount from the Westminster Cemetery. No longer in evidence is a monument "in the classical style," which was begun under Long's direction to stand in a place of honor just across from the Oliver vault, for the first promoter of Green Mount, Samuel D. Walker. It is impossible to know how many smaller commissions he undertook, but it is obvious that Green Mount reflects heavily the talents of Robert Cary Long, Jr. 18

Plots chosen, the natural business of a cemetery was ready to begin, and in December 1839, the first permit to inter was issued in Green Mount. This was for tiny Olivia Cushing Whitridge, whose burial, according to a poem written after the occasion by lawyer-poet Severn Teackle Wallis, consecrated the ground as no ceremony could ever have done. By 1843, 638 people had been buried in the cemetery, almost one third of them removed from other cemeteries and reinterred in new family plots. Within a decade of incorporation, there were more than 2500 graves in the rural cemetery. Burial necessitated markers, and the forest of white marble that Green Mount has become since then began to sprout. The first marker was a simple column surmounted by an urn set on the western edge of the plateau in 1840 to commemorate Sarah Ward. The cemetery had decreed as early as 1838 that markers of wood were prohibited and that the Proprietors might reject any monument they deemed unsuitable. That power was apparently invoked only once, when a Baltimore dowager attempted to add two stone lions to her family lot more than a century after the first monument was erected in Green Mount. A court decree, however, confirmed the power of the Proprietors as final arbiters of design and taste.19

Markers proliferated from 1840 on, drawing on the handy supply of fine Baltimore County marble. They show few signs of control except those dictated by local and personal taste; they provide a remarkably continuous record, in fact, of Baltimore taste for almost two centuries. Although almost engulfed by newer monuments, there are scores of markers that pre-date the opening of Green Mount, markers that were transferred from other cemeteries

as family plots were established there. Typically ground slabs or simple tablets, they commemorate deaths reaching well back into the eighteenth century.

There was considerable demand for family vaults as Green Mount opened, and as the terrain was suited to their construction, hillside vaults ring a good part of the plateau. Buyers of level plots, however, also wanted vaults. The Proprietors were determined that the cemetery should not be peppered with plots that had become single tables of stone covering cavernous crypts below; to permit such would erase the rural nature of Green Mount. Long designed instead an above-ground crypt-entrance, Egyptian in style, with steep stairs leading down to a vault with underground shelves for interment. The whole interior can be viewed from the wrought-iron gate above. This crypt, with slight adaptations and embellishments, became popular immediately. As it occupied only a portion of the available ground space, it preserved the proper rural character of the cemetery.²⁰

The family whose subscriber chose a crypt, could look forward to a known and orderly form of burial and memorial, at least until the crypt was full and it became necessary to utilize the grassy space around it. There is evidence of considerable planning in the above-ground plots as well. In the usual plan, the subscriber and his wife are commemorated by an obelisk or other marker in the center of the plot or by a pair of large markers at the rear center, with the wife's marker often not quite as large as the husband's. Succeeding generations were to be circled or grouped around as they died, with smaller markers. Some of the planning succeeded. The Farnandis family lot focuses on a large, cross-topped obelisk dedicated to the subscriber and his immediate family, surrounded by scores of his descendants in neat circles, with markers as nearly identical as generations of stone-cutters could make them. Often, however, the plans went awry. In-laws were introduced, sons outdid their fathers in fortune and had more to spend for marble, or families died out or departed. Most succeeding generations simply had ideas of their own about where in the plot they should be buried and how high the marker should be. A cemetery was the ideal ground for personal expression and many Baltimoreans gave free rein to it. Family plots, indeed, reflect in their arrangement the ideas of later generations quite as often as they do the plans of the founders.21

Monuments in Green Mount, too, reflect the tastes of the survivors more often than they do the tastes and character of the deceased. It is tempting to try to read in a memorial the character of the individual. John Pendleton Kennedy's gravestone, for example, is a dignified, architectural rendering of the cross-topped block, inscribed on each side with his achievements as Congressman, delegate to the legislature, educator, Secretary of Navy, and in Baltimore civic life; there is no impression here of the romantic novelist or the flamboyant orator. His wife's marker, on the other hand, is a lovely, romantic piece of sculpture — a young girl, unaware or perhaps only too aware, that the faithful mongrel at her feet, looking up at her with love and concern, pins down a writhing serpent with its paw. Is it an allegory of death, some moments in Mrs. Kennedy's girlhood, or simply a favorite carving that she or perhaps some trustee

chose for her grave? Does the enormous monolithic obelisk commemorating stone-cutter and quarry president Hugh Sisson embody his perception of himself or that of his heirs? Most such questions cannot be answered. Some probably chose their memorials before death, and for many wives at least the marker stood ready in place for years, awaiting only the chiseling of the terminal date. Still, it is safe to assume that most of the monuments reflect more of the living than of the dead.

Green Mount is so vast and filled with human remains and stone memorials that it is best studied in microcosm. Section Q offers material for such a study. It had the first burial in the cemetery and has been in use ever since. Touching Oliver's Walk and abutting mausoleum circle it is fairly typical of the original group of sections opened. Aside from little Olivia Whitridge, it boasts none of the celebrities of Baltimore's history in its fifty-seven plots. Nonetheless, it gives a very comprehensive reflection of the nature of Green Mount and its development.²²

By 1840, eight subscribers had bought thirteen plots in Section Q. Typically, all but one of the areas selected fronted on Oliver's Walk and that one was but a single plot removed from it. Five purchased only one plot, two bought two plots each and three brothers bought a four-plot lot together. The buyers in Section Q offer a limited but fairly good cross section of Green Mount plot-owners in general. Those purchasing single plots were a boot and shoe maker, an oyster transporter, a grocer, hotel owner David Barnum, and a physician. Hugh Birckhead and Charles R. Pearce, commission merchants and partners, purchased two adjoining two-plot lots, and the Whitridges, one a physician and the other two commission merchants, bought the only four-plot group ever sold in the section. The grocer and oyster transporter later sold their plots as did Birckhead. All other plots in the original purchase were retained by the buyers to serve as multi-generation family burial grounds.

All but one of the fifty-seven plots in the section had been sold by 1866, the date of the next published list of plot-holders, and the last was sold shortly afterwards. Two plots, though sold, were never used and are completely vacant today. Only one multiple-plot lot was purchased in the section after 1840. A bricklayer bought a plot on Oliver's Walk along with the one directly behind it, apparently for family use and not for speculation. After burying an infant son in one plot, some twist in the bricklayer's fortune necessitated sale of his holdings, and the tiny child's marker stands today as a discordant note among the eleven large and nearly identical markers of the family who bought the plots and used them for burials for more than a century. Eight of the fifty-seven plots do not reflect today the names of original buyers, indicating a turnover of nearly fifteen percent.

There are at least twenty-five reinterments in Section Q from original burials elsewhere, and it is probable that many of the scores of illegible markers are also early ones brought in from other cemeteries. Those most frequently reinterred were parents of the plot-owner's wife, the owner's parents, siblings of both, and children of the couple who died before the plot was purchased. Many of the relationships among those in individual plots would tax

the best efforts of a professional genealogist; the cemetery plot was an odd mixture of public, and often very ostentatious, display and of very private family matters and emotions. One family, for example, commemorated "Aunt Lizzie" in a lovely monument, but failed to elucidate any farther, and there are a number of markers inscribed only "Father" or "Mother." The family knew their identities and that was what was important. Scores of nearly anonymous children's markers dot the section. Among the most poignant and the most nearly anonymous are those inscribed "To our darling Babe," and to "Our Little Boys." Single markers frequently commemorate the deaths of a number of children; dates are usually omitted, but the toll of infant mortality during the early years of Green Mount is impressive where it is documented. Nevertheless, the ratio of adult to child burials in the section is a surprising five to one, and in the majority of plots there are no infant burials commemorated. The section is obviously peopered with hundreds of infant graves completely unmarked.²⁵ Some of the unidentifiable buried along the sides of family plots are probably servants. Only one servant is identified in Section Q; "a faithful and loving nurse ... for twenty-six years" rests among some of her tiny charges in the Whitridge lot.

The plot owners in Section Q in 1866 show a much broader cross-section of occupations than did the original Green Mount subscribers of 1840 and their plots record considerable social fluidity. About ninety-three percent of the owners in 1866 are identifiable by occupation. Merchants in 1866 were no longer the largest single group of subscribers in the section, although they account for twenty-nine percent of the buyers and claimed thirty percent of the plots, with about one third of their number commission merchants. Five professional men - four doctors and a minister - bought plots in the section and account for nine percent of the subscribers, with a like percentage subscribed by those in transport, lodging, etc., including two tavern keepers, Clerks, those in sea-related work, and in miscellaneous occupations account for seven percent. The most dramatic change in the make-up of the body of plot holders in this quarter century is the sharp rise in subscription by those in the trades and crafts. Section Q seems to have attracted clusters of stone-workers and carpenters, but other trades and crafts are heavily represented, too. Together the two groups account for thirty-four percent of Section Q subscribers and for one third of its plots. Although some in this group had become figures of affluence before their deaths, it is clear that the developers' hope that the mighty would lie next to the more humble was fulfilled in Section Q.

There is, perhaps, some clustering by status in the section. The side on Oliver's Walk attracted all the commission merchants and two of the doctors, but this was the earliest side subscribed, when tradesmen and craftsmen bought fewer plots than they did later. During the quarter century after 1840, the pattern changed. The rear plots filled up indiscriminately, except where neighbors or those in the same crafts selected sites together. A doctor, whose inscription shows considerable family pride in his vocation, lies with carpenters as neighbors on two sides. A tavern keeper lies next to a minister, whose monument details his ordination, and although one of the clerks in the section

was buried next to another tavern keeper, in the other plots bordering his are a commission merchant, a merchant and a physician. Far more heterogeneity than elitism seems evident in the section if one keeps in mind the basically restrictive cost of the plots.

There are signs of considerable social mobility within the section. The clockmaker moved out of the craftsman class and became a well-known importer and merchant of jewelry. One of the saloon keepers went on to become a stock broker, operating from the same address that had served for his saloon. The heir of one simple craftsman became a physician, and a number of merchants moved into the status of commission merchants. Some plots, of course, show downward mobility. A plumber's wife had to open her house on South Broadway to boarders after his death, but was still able to save enough to provide an impressive marker for herself. The hotel keeper's son was not the businessman his father had been, and although his plot in another section contains some of the loveliest marble work in the cemetery, the family's best years had been their earliest ones. ²⁶ The data on the section have not been studied in detail, but there are many signs that it was an unusual family line that remained static.

The epitaphs in the section hold few surprises and are simply a microcosmic sample of those in Green Mount generally. Epitaphs were usually the smallest and shallowest carving on monuments and the first to erode, so scores in the section are illegible. Of those remaining, the most popular are drawn from the Beatitudes, particularly "Blessed are the pure in heart." Section Q is notable, if for nothing else, the number of its pure in heart. The new interpretation of death, which was coming into vogue as the cemetery opened, is repeated time after time. Death is not the terrible extinction, but a rest or a sleep. There are dozens of variations on the theme, "She is not dead but asleep," and almost all are applied to women. The passive quietism of the new death was apparently difficult to apply to the nineteenth-century male. Another large group of epitaphs promise "the Kingdom" or "crowns of gold" to the dead, and sometimes both. A bit of the hierarchy of family life shows occasionally, as on the single monument to husband and wife, inscribed only "For Thou presented him with the blessings of Goodness. Thou settest a crown of pure gold on his head," leaving some room to wonder about the deserts of his consort. Few of the epitaphs catalog the deeds or accomplishments of those memorialized, but some are more distinctly personal than others. While a number of families chose as final statements on dead children a currently popular epitaph, "She made Earth brighter and Heaven dearer," one family ignored the popular flourishes and buried their mother with the terse, but disarmingly personal, "She hath done what she could."

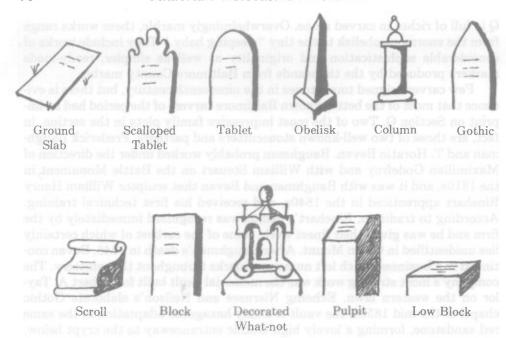
If the markers in Section Q are a valuable historical and biographical archive, their artistic and stylistic qualities are equally important. Time and pollution have eroded a great many of them so that their historical content is erased and their artistic quotient endangered. Details — urns, filials, flowers, fingers, and other members — break off or erode away and whole sections of monuments sometimes shift on their bases and occasionally fall. Still, Section

Q is full of riches in carved stone. Overwhelmingly marble, these works range from the enormous obelisk to the tiny "sleeping baby." They include works of considerable sophistication and originality as well as simpler, ready-made markers produced by the thousands from Baltimore County marble.

Few carvers signed tombstones in the nineteenth century, but there is evidence that most of the better-known Baltimore carvers of the period had an imprint on Section Q. Two of the most impressive family plots in the section, in fact, are those of two well-known stonecutters and partners, Frederick Baughman and T. Horatio Bevan. Baughman probably worked under the direction of Maximilian Godefroy and with William Steuart on the Battle Monument in the 1810s, and it was with Baughman and Bevan that sculptor William Henry Rinehart apprenticed in the 1840s, and received his first technical training. According to tradition, Rinehart's genius was recognized immediately by the firm and he was given their finest work, some of the earliest of which certainly lies unidentified in Green Mount. After Baughman's death in 1848, Bevan continued in a business which left numerous marks throughout the cemetery. The company's most striking work was the memorial vault built for Robert A. Taylor on the western lawn. Echoing Niernsee and Neilson's elaborate Gothic chapel of the mid 1850s, the vault is a tiny hexagonal adaptation in the same red sandstone, forming a lovely high Gothic entranceway to the crypt below. It is the first complete deviation from Robert Cary Long's crypt design and one of the showpieces of the cemetery. In Section Q, Bevan and Sons contributed a simple tablet to a fellow stone-worker and his wife and a large, rich tablet, decorated with an elaboratey draped pall, flowers and an anchor, for the tavern keeper-broker.27

Other important stone workers represented in the section include the Gaddess and Benteen partnership and Hugh Sisson. Gaddess carved a tiny obelisk, typical of the period and shrunk from adult size to commemorate a child, as well as several markers for the plot of Augustus McLaughlin. These include a beautifully proportioned, urn-topped obelisk and a baroque set of markers for the McLaughlins, ornate beds really, with blankets of grass and a sleeping baby over Mrs. McLaughlin. Hugh Sisson was probably the most distinguished stonecutter of the century, going on to become president of the Baltimore County Beaver Dam Quarry and to furnish marble for the interiors of the Johns Hopkins Hospital, Baltimore City Hall and the Peabody Institute.²⁸ His best known contributions to Green Mount are the ornate tomb of A. S. Abell, founder of the Baltimore Sun, and Betsy Patterson Bonaparte's sarcophogus. His contributions to Section Q are simpler, but he produced and signed the marker to the first burial in Green Mount as well as one of the popular broken column memorials for the tavern keeper-broker. Although the city's cemeteries and the county's marble quarries combined to make stone cutting a major industry in the area, virtually no research has been directed toward that important craft. Section Q, and Green Mount as a whole, contain a wealth of eroding evidence that needs attention.

Recent research shows that a number of distinct changes in styles of grave markers occurred between 1840 and the present. These changes can be perio-



 $\label{eq:Figure 1.} F_{\mbox{\scriptsize IGURE 1}}.$ Styles of monuments represented by five or more examples in Section Q.

dized fairly sharply in most cemeteries, with the East accepting the new styles more quickly than other sections of the country.29 Evidence in Section Q suggests that Baltimore was aware of changes in marker styles but was somewhat more conservative than the samples in these studies, East or West, in the rush to adopt the new. (Figures 1 and 2) The earliest markers in the section, many of which were transferred from elsewhere, are ground slabs, tablets, and fiddleback tablets (with scalloped or scrolled tops), often decorated with various symbols of death and mourning such as the weeping willow and extinguished torch. Tablets with smooth, rounded edges but sometimes highly carved faces were overwhelmingly the most popular marker in the section, outnumbering any other style chosen in almost every decade since Green Mount opened. Gothic, the tablet with a pointed arch, is barely represented in the section even during the height of the Gothic revival in church architecture, and no use of it is found after the 1850s at all. The block, a tablet with squared corners and usually extra thickness, appeared earlier in Green Mount than in most other places in the country as did the low block, an adaptation set almost flush with the ground. Obelisks and columns enjoyed some popularity and are among the most impressive memorials in the section, for they are usually of considerable height and dramatic effect. David Barnum's column with his son-in-law's obelisk next to it are fine examples of these forms on Oliver's Walk, as are, on the other side of the section, Baughman's severe obelisk and Bevan's large truncated column surmounted by a life-size allegorical figure.

	Pre-	1840s	1850s	1860s	1870s	1880s	1890s	1900s	1910s	1920s	1930s	1940s	1950s	1960s
Low Block							• •	• • •	• •	• •		• 1		•
Pulpit					•	• •	• • •			• •				•
Decorated What-Not			•	• •	•									
Block		rulto ut Art	• • •				•	• •				mili		
Scroll	1111	• •			210				1.0					
Gothic		• •	0		LI/					ud t 4 local			net	
Column		• •						•	•					
Obelisk		• • •	• • •	• • •			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	• •		4.				
Tablet	• • • •	•••	• • •		• • • •	• • •	• • • •	• • •		• • •				
Scalloped Tablet			1		•					oda na a	2001	ehen tret	ia ini	ola
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FIGURE 2.

Styles of 202 Monuments by date of occurrence in Section Q. Fifty-six monuments with illegible dates are omitted. Styles represented by five or more examples in the section are arranged from top to bottom in rough order of their appearance in Green Mount. Newer styles were introduced regularly, but older ones — ground slabs, tablets, obelisks, columns and scrolls — did not give way to the new and continued in use much longer than elsewhere. Cf. Francaviglia, op. cit., passim.

Typical of the styles that came and passed fairly quickly is what might be called the decorated what-not. Its origin seems to have been a blunted obelisk, whose top supported a horizontal cross, set on almost as a roof. The cross became more elaborate and finally frankly a roof, with gables and everything but drain spouts, and the body of the obelisk was often obscured with a confusion of decorative elements — pilasters, scrolls, escutcheons and sometimes tumbling roses. Its silhouette came to resemble more and more a very ornate High Victorian house. The decorated what-not symbolized solidity and affluence, but it was a transient style; its use centered in the 1880s and by the next decade it was completely out of date.

If Baltimoreans tried the decorated what-not and rejected it, they clung tenaciously to some other out-dated styles of markers. The ground slab, pulpit and tablet are examples. The reasons for this are not difficult to discern, however. Although there are family plots in Section Q which are glorious hodge-

podges of style and design, there was also a marked tendency on the part of many to keep within the styles, if not the plan, chosen by the founders of the plot. Eschewing the new, they ordered copies of earlier family stones, often with added height and contemporary decorative elements, but long after the basic style itself had passed from use elsewhere. A plot in the section with eleven pulpit markers, spanning more than a century is an example. Green Mount has, certainly, elegant examples of the highest style of every decade since its incorporation. It also shows a conservative thread, in which a sense of family and order has very often slowed down the race toward style.

A final question about Section Q needs to be considered. Is it a living cemetery section, still the focus of family attention and still receiving the dead, or is it simply a piece of Baltimore's past, a museum of historical but of no other present interest?³⁰ There have been burials in the section in this decade; one large obelisk, dating back to 1845, records a death in 1971, and in another plot, first used in 1865, a lovely tablet copied after the plot's original marker, awaits only the inscribing of the last date for a daughter of the family. Most of the burials in the section since 1940, however, have been of daughters, unmarried ones usually. Sons are very few; they have apparently opted for other places and perhaps other styles of burial. It is significant that the mean age at death of those buried in the section since 1940 is seventy-eight, and that markers in the section record the burial there of a single person born in this century.³¹ Most of the family lines in Section Q have apparently almost run their course; the section looks backward not forward. It is not yet just a museum, but like most of the Green Mount plateau, it is not far from it.

Green Mount, however, is an anomaly. It is a white haven in the midst of the black ghetto, engulfed by the city and left stranded among blocks of decaying rowhouses, junk dealers and noisy traffic. Kennedy's plot no longer looks trees have been replaced by new and sometimes alien varieties. It is still,

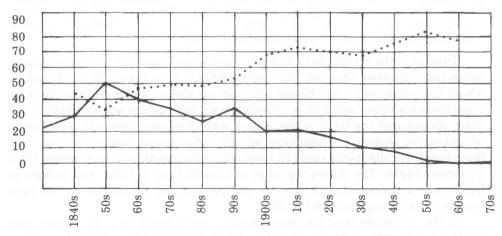


FIGURE 3.

Number of burials in Section Q (unbroken line) and mean age at burial (broken line). Scores of monuments with eroded data are omitted.

though, very close to the concept of the rural cemetery of 1840 — a lovely joining of nature and the rites and symbols of passage. Flowers abound, a pigeon hawk presides from the trees, and an exploring raccoon leaves prints on the marble deep inside a crypt. The carefully tended grounds offer a curious visitor one of the best walks in nature-bent-to-human-needs that Baltimore can boast and potential riches in moral, artistic, and historical instruction as well.

Green Mount, however, is an anomaly. It is a white haven in the midst of the black ghetto, engulfed by the city and left stranged among blocks of decaying rowhouses, junk dealers and noisy traffic. Kennedy's plot no longer looks out into a sylvan wilderness where only the birds stir the calm; it faces layer after layer of rowhouse roofs, stretching monotonously across the horizon. And the birds of Green Mount are usually stilled by the scream of sirens competing with each other outside the walls.

What would probably sadden Kennedy more, is that the stream of visitors he expected has virtually dried up. Oliver's Walk, which threatened to become so popular with visitors in the 1840s as to turn Green Mount into "a common tea-garden," is perhaps the loneliest path in Baltimore today. The few who come to visit peer out at the rural cemetery from the isolated safety of their cars. Blacks, whose visits to the cemetery were unlikely enough in the nine-teenth century to require no regulation by the Proprietors, live up to the expectations of that century and avoid it. No black is buried there; black history and interest are elsewhere.

Green Mount is almost an anachronism, too. Burials in the cemetery as a whole probably reflect very nearly the declining curve of Section Q.³³ As the plateau filled up, new areas were offered — the hillsides and the lowlands — and these have almost filled up, too. The chapel lawn, the last highland space which was opened about the beginning of this century, became the focus of newer fortunes, of older families who had outgrown earlier plots, and of Baltimore and Maryland statesmen. That lawn cut short the nineteenth century homogeneity; in it the lessons of success exclude those to be learned from the nearly anonymous. No humble nestle among the heroes of fortune or politics near the chapel.

Today Green Mount is almost completely a part of the past — almost a museum. Those who have links to that past through the cemetery are afraid to visit it; those who do not, treat it with the scorn of irrelevancy. Both groups are the losers. For Green Mount records more than a century of the mainstream of Baltimore history and tens of thousands of the lesser streams as well. Its historical evidence and artistic detail erode quickly as the elements and urban vapors chew away at its marble. A disappearing archive, a walk in nature, a lesson in the ways of mobility up and down, or perhaps only a return to the nineteenth century, Baltimore's first rural cemetery deserves more attention than the twentieth century gives it.

REFERENCES

1. The origin of the rural cemetery movement and its relationship to nineteenth century values is treated in an excellent article by Stanley French, "The Cemetery as Cultural Institution:

the Establishment of Mount Auburn and the 'Rural Cemetery' Movement,' American Quarterly, XXVI (1974), pp. 37-59. Philippe Aries, perhaps because of the breadth of his Western Attitudes Toward Death (Baltimore, 1976), pp. 77 ff., missed the rural cemetery movement, noting only that "the Romantic movement did not last long in America." Aries sees Pere la Chaise outside Paris as typical of the more florid style of French and Southern European cemetery, which he contrasts with simpler and starker styles in England and the United Stated. Although Stanley French denies any relationship between Mount Auburn and Pere la Chaise, the publicists for Green Mount in the 1830s considered the Baltimore cemetery the direct descendant of Pere la Chaise through Mount Auburn. Whatever its line of descent, Green Mount stands much closer in style to Pere la Chaise than to the cemeteries Aries sees as typically American - an Alexandria churchyard and Arlington National Cemetery. Nor can the rural cemetery style be considered a transient one, for it dominated American burial practices for more than one-third of U.S. national history. On Brooklyn's cemetery, see Charles Lockwood, "As Near to Paradise as One Can Reach in Brooklyn, N.Y.," The Smithsonian (April 1976), pp. 56-62.

2. Samuel D. Walker, Rural Cemetery and Public Walk (Baltimore, 1835), p. iii.

Ibid., p. 10.

4. Ibid., pp. 9, 10, 11, 14.

5. The corporation was a non-profit one and apparently no capital was involved in its initial stages. Oliver's heirs gave the Proprietors a bond of conveyance for the estate on December 1, 1838. The purchase price was paid off only in 1844 from the sale of plots, and the deed passed over to the Proprietors. See Baltimore City Land Records, AWB 357, ff. 271 and 274.

6. The Oliver House, demolished to make way for Niernsee and Neilson's new chapel has received little attention. It is pictured in Robert Cary Long, Jr.'s view of his first plan for the Green Mount gateway, and a large water-color of it exists in the Manager's office quarters at the cemetery. The neo-classical front may have been the work of Long's father, who did Oliver's Gay Street mansion, see Thomas W. Griffith, Annals of Baltimore (Baltimore,

1824), p. 189, but evidence is lacking.

7. The major sources of the history of the cemetery are two prospectuses, dated 1838 and 1839, and a series of reports to plotholders, dated 1840, 1843, 1848, 1866 and 1882, issued by the Proprietors. Also useful is the Proprietors' centennial volume, Green Mount Cemetery, One Hundredth Anniversary (Baltimore, 1938), especially the articles by Gerald W. Johnson and J. Hall Pleasants. The Manager of Green Mount, Mr. John Mayhew, and his staff have been helpful in corroborating detail. For the acts of incorporation, see Green Mount Prospectus 1838 and Reports 1840 and 1882.

8. Baltimore Sun, July 15, 1839.

Ibid.; and see The Dedication of Green Mount Cemetery, July 13, 1839, Baltimore, 1839; Green Mount Prospectus 1838; and Green Mount Report, 1840.

10. Green Mount inspired at least three other large rural cemeteries in Baltimore: Mt. Olivet

and Baltimore Cemeteries, incorporated in 1849 and Loudon Park in 1853.

Green Mount Report 1840. The wall, gate and mausoleum alone cost an additional \$41,000. The Proprietors, with an eye toward economy, noted that gravel unearthed as graves were dug would be used to improve the new roads and suggested that surplus gravel might be sold.

Dedication of Green Mount 1839 and Green Mount Report 1840. The first of three published lists of plotholders was included in the Report of 1840; it has served as the basis of figures here and analysis below of the first subscribers.

13. See W. Lloyd Warner, The Living and the Dead (New Haven, 1959), pp. 297-99; W. Kephart, "Status after Death," American Sociological Review 15 (1950): 642-43; and F. Young, "Graveyards and Social Structure," Rural Sociology 25 (1960): 446-50.

14. This pattern of selection shows up dramatically when the plots selected are shaded on a plat of the cemetery. The elms along Oliver's Walk were removed by 1848 because "the worm" was killing them. The only cure, tobacco juice, had proved too expensive to use, and in addition, it stained the marble underneath. See Green Mount Report 1848.

15. Realizing that the cost of a plot would be prohibitive to most Baltimoreans, the Proprietors

provided for installment purchases, and many bought on these terms.

1 have used many city directories to identify the original subscribers in the 1840 list. The Dielman File in the Maryland Historical Society and newspaper obituaries have helped resolve problems of common names. Most of the ten unidentified seem to have been shorttimers in town, but several who bear very proud Baltimore names but who were apparently never gainfully employed, should probably be listed as "gentlemen."

- 17. On Long, see Phoebe Stanton, The Gothic Revival and American Church Architecture (Baltimore, 1968), pp. 225, 240-43; and Wilbur H. Hunter, Jr., "Robert Cary Long, Jr., and the Battle of Styles," Journal of the Society of Architectural Historians 16 (1957): 28-30. A view of Long's Egyptian gateway was published in Green Mount Prospectus 1838, the Tudor gateway in Green Mount Report 1840, which also details Long's commissions at the cemetery.
- 18. Green Mount Reports 1840 and 1843. There is some evidence in the Manager's records to suggest that Walker was reinterred in another section; there is, however, no marker or memorial to him in the cemetery, although there is record of his burial in the spot opposite Oliver on the day after his death in 1848. See Baltimore American, August 2, 1848.

Green Mount Reports 1840, 1843, 1848; Green Mount Prospectus, 1838; and Baltimore Evening Sun, September 7, 1946. The lions are vindicated. They came to their rest in July 1977 guarding the wall of the Baltimore Museum of Art; Baltimore Sun, July 8, 1977.

20. The Long vault plan was published in *Green Mount Report 1840*, which noted that a vault was being built under Long's direction for "Mr. Reese." S. D. Reese, the only Reese in the 1840 list, had two plots in Section I, which passed later to Allen Paine. The vault on these plots is the original from which scores with minor variations developed. Its gate has rusted away and the entrance has been bricked up. The Oliver memorial is a small copy of the vault which serves as a base for an obelisk.

21. Baltimoreans did copy the styles of their forebears' markers very often, if not the heights, sizes, and placement of markers those forebears had envisaged. See below.

- My class in Material Culture at Goucher College, Spring 1977, collected the data used below on names and dates of those occupying plots in Section Q and on types of markers and epitaphs there.
- 23. Green Mount Report 1840 and city directories.

24. Green Mount Report 1866.

25. This was confirmed orally by the Manager of Green Mount, Mr. John Mayhew.

- Successive city directories yield a great deal of information about individual mobility. For the hotel keeper, see Francis F. Beirne, The Amiable Baltimoreans (New York, 1951), pp. 193 ff
- 27. Griffith, Annals, p. 213, and letters from Godefroy and others in Battle Monument Papers, MS. 1198, Maryland Historical Society, mention only a "Mr." Baughman. John T. Scharf, in History of Baltimore City and County (Baltimore, 1881), p. 268, notes that an "S" Baughman worked on the monument, but this is apparently an error. Frederick is the only one of that name traceable in the craft at that time. City directories list him as a laborer in the 1810s, a stone-cutter in the 1820s and in partnerwhip with Bevan by the 1830s. On Reinhart, see William S. Rusk, "Notes on the Life of William Henry Rinehart, Sculptor," Maryland Historical Magazine 19 (1924): 316-19.

28. See the Baltimore American's The Monumental City (Baltimore, 1895), pp. 88-91.

 Richard V. Francaviglio, "The Cemetery as an Evolving Cultural Landscape," Annals of the Association of American Geographers 14 (September 1971):501-09.

Warner, The Living and the Dead, pp. 318-20, classifies cemeteries as living and dead according to whether or not continuous burials still link living humans through an unbroken chain of generations to early ancestors.

31. The mean age of those buried during the same period a century earlier was 39 years, or half that for 1940-77. (Age at death cannot be ascertained in many cases, of course.) Life expectancy rates increased dramatically from 1840 to 1977, but not rapidly enough to account for the advanced mean age of those buried in Section Q in the twentieth century. The mean age at death of those buried in the section from 1900 to 1969 was 72.2 years; the mean expectation of life for whites in the United States from birth during the same seven decades was 60.9 years. Thus the mean age at burial in Q in the twentieth century was eleven years older than the average person born in that period could expect to live from birth. Historical Statistics of the United States, 1970, part I, p. 55; and Conrad and Irene B. Taeuber, The Changing Population of the United States (New York, 1958), pp. 269-72.

32. Green Mount Report 1848.

33. Although requested, specific data by decades on this point have not been forthcoming from Green Mount. An oral communication from the Manager's Office in August 1977, however, suggests that burials in recent years average about 150 a year. (This figure includes cremations at the cemetery's crematorium, and not all cremated there are buried there.) A century ago, burials averaged 700 a year. Green Mount Report 1882. None of the original 16' by 20' plots is available today although some plots for one to six, and one plot for eight, burials are still to be sold.

The Almighty Oyster: A Saga of Old Somerset and the Eastern Shore, 1850–1920

JOHN R. WENNERSTEN

Why, then the world's mine oyster,
Which I with sword will open.
Shakespeare
The Merry Wives of Windsor

Rew denizens of the ocean's depths have enjoyed as interesting a social history as the oyster. A sedentary bivalve found clustered in the bottoms of bays and river outlets to the sea, the oyster has been relentlessly pursued by man since antiquity. In the days of the Roman Empire Pliny the Elder wrote in his Natural History that Caesar's legions transported oysters from the British Isles across the Alps to satisfy the demand of Rome's affluent elite for this great delicacy. At the time of Marco Polo's illustrious visit to Cathay, the Chinese were already connoisseurs of the oyster and considered it a remarkable food for increasing man's longevity. Shakespeare's England believed that the oyster had powers as an aphrodisiac, a fact not lost upon the ambitious nobles at Queen Elizabeth's court. When Captain John Smith visited the Chesapeake shore in the seventeenth century, he observed that the Indians were well acquainted with oysters and valued them highly. The Nanticoke Indians, for example, were fond of raking up large piles of fresh oysters from creek bottoms with sharpened forked sticks and then indulging in feasts that sometimes lasted several days. The Indians of the American east coast had such an appetite for oysters that history records a mound containing eight million cubic feet of oyster shells near an Indian village on the Damariscotta River in the state of Maine.

The Chesapeake Bay has provided the oyster with an exceptional domain covering 2,300 square miles. It is relatively free of starfish and oyster drills that prey on oyster beds and the hospitable temperatures and less saline waters of the Chesapeake guarantee a bountiful spatfall. Wonderously reproductive, female oysters release millions of eggs and males produce a comparable amount of sperm. The fertilized larva after six or seven days acquires a shell thereby becoming known as "spat" and settles back to the bottom where it attaches itself to the oyster bed or cultch. The oyster beds of the Chesapeake are usually found in water less than forty feet deep. Few are found in the great channel that runs the length of the Bay as the bottom is too soft and muddy

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for oysters. The largest beds are found in the small bays, creeks, and river mouths of the Chesapeake in water that varies in depth from two to thirty feet.

The Chesapeake Bay was a late-comer as a center of the American oyster industry. From the colonial period to the eve of the Civil War, the New England Coast and the Long Island Sound were the great oystering regions. By 1840, however, the Long Island Sound could not keep pace with the demand for oysters on the east coast. To increase profits, Connecticut and New York watermen resorted to a new device called the dredge, a scoop-like device pulled by rope or cable across an oyster bar by a sailing ship. The dredges left few oysters for reproduction and the beds of the sound were soon depleted. Increasingly northern watermen moved south to exploit the abundant resources of the Chesapeake. Northerners and their dredges, however, were not welcomed on the Bay. Throughout the 1840s, the county sheriffs of Maryland's Eastern Shore kept a watchful eye for northern "drudgers" who would ruin the oyster preserves of local watermen.

Since they were restricted by law from transporting oysters out of Maryland's waters, New England businessmen began setting up oyster packing houses in Baltimore as early as the 1830s. The establishment of these firms coincided with the building of the Baltimore and Ohio Railroad; and as train service began to open up the hinterland, the oyster packers of Baltimore wasted little time in sending shipments westward. Even before the line was completed, packers sent wagon loads of oysters in the winter season over the Cumberland Road to Pittsburgh, Wheeling, and the Middle West. Once completed, the Baltimore and Ohio Railroad served as a powerful marketing stimulus for the oyster industry and by 1860 the Baltimore and Ohio Railroad annually carried over three million pounds of oysters westward.²

At first the expansion of the oyster industry in Baltimore had little impact on the counties of the Eastern Shore. Watermen, following the tradition of their fathers, harvested oysters for local consumption. Many shucked and sold their own oysters along the docks of Baltimore. The Civil War subsequently disrupted the Chesapeake Bay economy and during the conflict the watermen of the Eastern Shore found the freight business more profitable than oystering. At the war's end, however, two developments spurred an unprecedented expansion of the oyster industry: the development of a reliable steam canning process that allowed for long distance transport of oysters and a booming post-war economy that gave people additional money to purchase status-comforts and delicacies.³ In the 1850s a hungry traveller lodging in Pittsburgh in winter considered himself to be among life's fortunate if he could have his oyster stew. During the post-war era, in regions as distant as the silver and gold fields of Colorado and California, miners hungrily consumed large amounts of canned oysters as a regular staple.

The Chesapeake could hardly remain immune to such powerful economic forces. With oysters bringing high prices, industrious packers flocked to the Eastern Shore. Crisfield, a sleepy bayside hamlet, quickly became a seafood Mecca and overnight a city sprang up on a giant mound of oyster shells glistening white in the sun. Well-connected by rail to the northeast, Crisfield stood

astride the rich oyster bars of Tangier Sound. By 1872 Crisfield had the largest oyster trade in the state and provided employment for over six hundred sailing vessels. Crisfield sent its oysters throughout the country and to distant ports in Europe and Australia. Along the rickety docks that covered what was once swamp marsh, large heaps of oyster shells identified the presence of packing houses and shucking operations. Throughout the decade of the 1870s over ten million bushels of oysters were harvested annually by Crisfield-based boats and every morning, Sundays excepted, from twenty to thirty railroad cars could be seen moving from the packing houses heavily laden with oysters.⁴

A get-rich-quick spirit prevailed in Crisfield and the attendant lawlessness of local life made the waterfront community resemble a rough and sprawling mining town of the great western frontier. The lure of the almighty oyster attracted a swelling population of merchants, preachers, immigrants, gamblers, bootleggers, and prostitutes. New York dandies with "sea legs" more appropriate for Hudson River excursions scrambled on the Bay in rigs whose unseaworthiness complemented the ignorance of their owners. Those who visited Crisfield in the 1870s found a "raw and riotous" community with saloons and brothels filled with burly watermen fresh from their sloops after weeks at a time out on the Bay. Fistfights and brawls were common as the Bay country bred a fierce recklessness in men who pitted their lives against the wild elements of the Chesapeake. Goodsell's Alley, a street lined with businesses and saloons, was the source of constant fighting. The brawling and cursing became so intolerable one night that Thomas Hudson, whose second floor bedroom opened upon the Alley, took his shotgun and fired two rounds into the street to disperse the brawlers so that local residents could get a night's sleep. Crisfield, however, remained neither quiet nor dull. The chorus girls of John Blizzard's burlesque establishment merrily entertained hundreds of watermen to the consternation of the town's polite society. At John Burgess' restaurant oystermen could fight in a large boxing ring in the middle of his saloon. Harvey Johnson, a prominent local saloon keeper, served as Justice of the Peace. Every morning he would rap on the table and announce, "Gentlemen, the court is now in session, but I call your attention to the fact that business is still going on at the bar."5

To curb drunken lawlessness, the town commissioners voted Crisfield dry on December 8, 1875. Prohibition, however, did little to temper the town's salty rowdies. Oystermen quickly turned to "walking saloons" and speakeasies. The town's original jail, a railroad boxcar, soon proved inadequate and the city fathers constructed a large log cabin jail where watermen could nurse their wounds and their hangovers. In the summer time Crisfield's lusty watermen became the object of Methodist evangelical efforts. On August 16, 1873, a train load of Methodist women from Salisbury arrived in Crisfield to convert the ungodly. The women were dressed in their best finery and paraded through the streets to the delight of the watermen. Later the town thronged to the twenty-five revival tents that the ladies had established a short distance from the town at Nelson's Woods. Unfortunately a fierce rain and electrical storm

disrupted the proceedings before Crisfield's lost souls could be rescued. To many Crisfield Methodists it seemed that even nature was leagued against the Holy Writ and the public peace.⁶

Crisfield's industry impressed visitors. "Oysters, oysters, (are) everywhere, in barrels, in boxes, in cans, in buckets, in the shell and out," declared Harper's Magazine in 1879. Throughout the town the air was permeated with the smell of "defunct oysters." Passengers on board the steamer City of Norfolk beheld a strange sight when the port of Crisfield came into view. To their surprise they saw a shanty town on stilts, a town of poles, and myriads of boats of all sizes and descriptions. A town of oysters, built on oyster shells; such was Crisfield, the queen of honkytonks and mistress of the oyster empire of Tangier Sound.

Newspaper reporters were particularly impressed by the economic aspects of ovstering. Crisfield's ovster industry employed over three thousand men and hundreds of women and children. Dozens of packing houses lined the Bay and by the turn of the century Crisfield would boast over 150 seafood processing establishments. In the packing houses workers shucked oysters and packed them in kegs and barrels containing ice for shipment by rail. The shucking stalls were located in dirty sheds and oyster juice trickled on the floor amid piles of muddy oysters. Often the shells were allowed to fall into the Bay through holes in the floor. Those not discarded in this manner were either used to pave roads in the county or else sold to four thriving lime plants which converted the shells into fertilizer. Lines of female oyster shuckers used knives with great dexterity to obtain the Bay's treasure. A bemused spectator reported the process: "She seizes an oyster, inserts the knife between the shells, then with a quick turn of the wrist the shell is opened, the oyster cut loose and dropped into the pan, all with one movement." Shuckers were kept supplied with oysters wheeled in from storage bins on the docks. While the business of shucking was not difficult, workers were frequently forced to stop work and warm their hands which had become numbed by handling cold oysters. During the heyday of the oyster boom, Crisfield packers paid shuckers as high as \$3.50 a day for twenty gallons of oysters. As soon as a shucker filled her bucket, she took it to a window that opened into the packing house. There a man called a "skimmer" poured the bucket of oysters into a large strainer and then washed them off with fresh water. He then scooped up the oysters into a quart measure and poured them into large tubs of cold water. A record was kept of every gallon of oysters handed through the window and workers received a brass check for each gallon shucked. At the end of the day packers paid twenty cents for every brass check held by the shucker.8

Although the oyster season from September 1, 1877 to June 1, 1878, was considered poor, Crisfield managed to ship 25,000 barrels of shell oysters and 300,000 gallons of shucked oysters to Baltimore, New York, and other cities. Packing houses like those operated by Isaac Coulbourn, John Lee Carmon, and J. H. Goodsell were hives of activity. Packers paid watermen twenty-five cents a bushel which usually produced a gallon of oysters. The same gallon that cost them forty five cents to buy and shuck, packers sold for a dollar. With such

high profits at stake, packers sought to outbid and out-maneuver their competitors. Isaac Tawes, like most shrewd packers, kept his invoice book of urban wholesalers under lock and key to prevent being underbid by a rival. When oysters were in short supply, packers diluted their kegs of oysters with large amounts of water and ice and told their customers that oysters could only be savored with large amounts of "likker." Although the industry attracted many would-be entrepreneurs, oystering was a rough business. Competition was stiff and packers argued, haggled, and connived for good oysters, good shuckers, and good customers. They also had to contend with railroad and steamship agents who rarely had adequate labor to load oysters for shipment. Many packing houses folded or changed hands annually and cautious local businessmen invested in real estate, hardware stores, and saloons rather than hazard the rough and tumble of the oyster trade.

The Somerset County waterman at his tiller on the Bay tended like most Eastern Shoremen to experience the vagaries of the oyster industry in the same manner that he endured the weather; there were good packers and bad ones and occasionally it seemed that they, like the icy weather of a winter season, were leagued against him. Yet most watermen were good natured and accepted a life of continuous struggle as long as they were permitted to sell ovsters on a strictly cash basis and no one attempted to take away their freedom. In the late nineteenth century, Somerset County's fifteen hundred watermen were divided into two principal groups, drudgers and tongers. The first group called drudgers by local folks used large sailing vessels to pull a basket-like scoop across the oyster beds. Although dredging had been originally prohibited on the Eastern Shore, Somerset, like its sister counties, liberalized its laws regarding dredging in the 1850s. After the war, drudgers could operate on the Bay as long as they remained in deep water. By the 1880s, however, Crisfield's dredging fleet enjoyed considerable notoriety for defying local oyster laws and poaching oysters in shallow county waters. 10

Most of Somerset's watermen, though, tonged for oysters and used small sailboats that needed only one or two men. In Somerset the most characteristic tonging boat in the late nineteenth century was a round bottomed boat formed from three dug-out logs joined together. This typical tong boat had one or two sails and generally a jib and no deck. These boats were from eight to twenty-five feet long and were quite seaworthy.

Men working on a tong boat divided the labor between them, one tonging while the other culled the oysters that were too small. The waterman seized the handles of his tongs and allowed the heavy irons to slip down into the water until the handles stood up vertically before him. By spreading the handles apart, he opened the teeth. After opening and closing them several times until he felt that he had a good batch of oysters, he slowly raised the tongs and dumped the catch on the culling board. As soon as the board was full, the culler picked up his hammer and began to break the clusters of oysters, throwing the small ones overboard and the large ones into the boat. After a time the tonger and the culler changed places. In the shallows of Tangier Sound and at the mouths of the Wicomico and Manokin Rivers the little boats anchored over

the beds and bobbed lazily as their crews busily engaged with the tongs and called to one another from boat to boat.¹¹

Although oyster boats under sail on the Bay were picturesque, the actual business of tonging was physically exhausting. As oystering was a winter occupation, watermen were chilled by the freezing water splashed up by the tongs. Handling cold and wet oysters on the culling board caused severe cramps and fatigue. Only the hardiest could stand such a rigorous life and the death rate among oystermen was very high. Rheumatism and other infirmities caused by a life of extreme physical labor and constant exposure to the elements took their toll. Such risks made watermen fatalistic and most aimed no higher in life than to get through the winter months. Reckless of the future, they lived for the moment. In the summer months many oystermen turned to fishing or farming. Complex in habit and attitude, watermen were also clannish, secretive about their business and suspicious of outsiders. Paradoxically, in local community life they were viewed as both freedom-loving mariners and shiftless rogues.

Unlike the tongers, the men who manned the dredge boats considered the entire Chesapeake their province. Piloting schooners of ten tons or more with a deep keel and flush deck, the captains of the dredge boats could earn much more money with their oyster scoops than the tongers. While many kinds of sailing vessels were used for dredging in the Bay, the most characteristic boat in Somerset waters was the bugeye. A product of economic necessity, the bugeye was constructed to be sturdy enough to pull an oyster dredge under full sail. Somerset's watermen had been unable to use their small sailing vessels for dredging and between 1884 and 1888 more than forty master shipwrights had vards in the county and each launched one or more vessels annually. Briefly described, the bugeye was a small flat-bottomed centerboard schooner of three to fifteen tons with a cabin aft. According to Eastern Shore folklore, the ship received its distinctive appellation because it maneuvered so well that it could "turn in a bug's eye." M. V. Brewington, an authority on Chesapeake Bay sailing craft, believes that the most plausible explanation is that the word derived from the Scotch word "buckie," meaning oyster shell. As there were large numbers of Scottish immigrants in the Chesapeake area during the late nineteenth century, this explanation seems more likely than the argument that the boat was so named because it had distinctive hawseholes which when viewed from dead ahead were said to look like "bug's eyes."12

One of the best known builders of this distinctive sailing craft was John Branford of Fairmount, Maryland. Between 1883 and 1911 this resourceful shipwright constructed twenty five bugeyes. Branford in the 1880s constructed a complete bugeye including sails and labor for \$1,141.06. Of this he reaped \$350 profit which at 1,407 hours of labor averaged out to twenty five cents an hour. Other builders of bugeye craft were Isaac Somers of St. Peter's, Sneed Parks of Fairmount, and Stephen McCready of Crisfield. The last known bugeye constructed in Somerset was the *C. F. Miles* built in Oriole in 1909 by R. L. Miles. 13

Dreding like tonging was an unpleasant and difficult occupation. The crew

lived in a cramped and smokey cabin on board and subsisted on coarse fare. When the "drudge boats" reached the oyster beds in deep water, the crew let the dredge drop overboard and at the same time let the rope run out behind. In this manner the dredge or scoop was dragged across the oyster bar. The iron teeth of the dredge dug into the oyster bed and the scoop was soon full. Then the crew turned to the difficult task of winding up the rope on a hand turned windlass, Samuel T. Sewell, who worked on the Chesapeake dredge boats at the turn of the century, remembered the ordeal of the hand windlass. "In my time," he recalled, "we used handwinders to bring the oysters on deck. And it was backbreaking work from sunrise to sundown." There were usually two windlasses, one on the port and one on the starboard amidships. Each windlass required the labor of four men. As the dredge filled with oysters, the crew would wind the cable around the drum of the windlass and bring the dredge on deck. The dredge was so heavy that Sewell described it as "like pulling in anchor while the boat was sailing."14 Understandably, the dredge boat captains had difficulty keeping their crews. Millard Tawes of Crisfield remembers that his father signed on to dredge oysters in the 1880s. "My father lasted exactly one day on that dredge boat before he quit," Tawes said. "It was inhuman work and my father was not about to ruin himself for oysters." Captain Jim Revell of Somerset owned a small bugeye and in the winter of 1886-1887 he earned \$644.13. The money was divided by thirds. The boat was awarded a third for maintenance and repairs, the skipper received a third, and the crew got a third. Although his profits enabled Captain Revell to get by, dredging on the Chesapeake seldom led to great wealth. The boats usually left Crisfield or other ports on Monday morning and returned early Friday afternoon with their catch. After five hard days out on the Bay, the crews were eager to celebrate a night out on the town.15

During the 1880s the oyster boom on the Chesapeake was at its height. In 1884, the peak year for the industry, watermen harvested a record fifteen million bushels of oysters. A reporter for Harper's Weekly Magazine described the boom as "simply a mad scramble carried on in 700 boats manned by 5,600 daring and unscrupulous men." To obtain crews for their boats, many oystermen relied on crimps who recruited or duped drunks from the docks of Baltimore. Immigrants, most of whom barely spoke English and were ignorant of American ways, were beguiled into signing on with the promise of ample food and good pay. Once on board the men were treated unmercifully. Men were also shanghaied into service. Immigrants, collectively known as "paddies" were kidnapped and intimidated by brass knuckle and pistol into manning the windlass. If these men were lucky enough to survive the season, they were put ashore penniless. Occasionally "paddies" were murdered. In order to avoid giving a captive crew member his due wages, a dredge captain would turn the ship's tiller abruptly and the boom of the sail would swing violently and knock the man overboard into the icy Chesapeake. Many floated ashore and were buried in unmarked graves. Although the "drudgers" were notorious for their abuse of their captive crews, they were politically powerful and the Maryland legislature was reluctant to move against them. The kidnapping of German

immigrants in Baltimore to work on the boats finally prompted the Maryland German Society to mount a public protest against the dredgers and state officials began to take an interest in rescuing shanghaied Marylanders. It was not until after the turn of the century that the cruelty of dredge boat captains was documented in Federal Court. In 1917 fifty-year-old William McPherson received a judgment of \$1,500 in damages against Noah Holland of the bugeye Ariel. After hiring on in December, 1915, with the promise of fifteen dollars a month wages, he had been treated as a slave. As Captain Holland did not give him proper clothing or equipment, McPherson lost nine fingers and nine toes to frostbite. 16

Technological innovation, however, rather than the federal courts put an end to involuntary servitude on Chesapeake Bay. About 1906 oyster dredgers began to get relief from the hand windlass as eight horse power gasoline engines for winding in the heavy dredges became available. With the "power winders" four men could do the work of eight required for the hand winders. The new gasoline winders not only relieved the labor shortage on the Bay but also allowed the boats to obtain more oysters. By the end of 1908 many dredge boat captains had purchased gasoline-powered winders and the tyranny of the hand windlass would soon become legend on the Bay.

The widespread use of the dredge on Chesapeake Bay brought the men in the dredge boats into open conflict with the tongers over access to the oyster beds. Because the dredgers left so few oysters on the bars for reproduction, county laws prohibited dredges from operating in river mouths and local waters. The dredgers, however, defied the law and relations became so strained between the two groups of watermen that the state legislature established an "Oyster Navy" in 1868 to keep peace on the Bay. Using schooners equipped with Dahlgren howitzers and Maxim rapid fire rifles, the oyster police were charged with the task of protecting the tongers' "rocks" (oyster beds) from marauding dredgers. As watermen frequently resorted to guns to settle their disputes during oyster season, the Navy placed armed schooners at the mouth of the Manokin River, the Holland Straits, Honga River and Swan Point off Rock Hall. Each police boat had a crew of three and the captain received a salary of fifty dollars a month while the crewmen drew thirty dollars. Also, each man received thirty cents a day from the legislature for rations. Somerset County, in addition, maintained its own armed vessel in the mouth of the Wicomico River.17

To avoid the oyster police, the dredge boats invaded the county oyster bars at night. Detection was difficult and many tongers resorted to constructing crude watch shanties on stilts at selected oyster bars where armed guards could protect their "rocks" from oyster pirates. Ernest Cox, a Somerset dredger, was a famous pirate on the Manokin River oyster beds. After a fierce exchange of gunfire on September 10, 1912, local tongers finally captured Cox at the Connel Oyster Bar. 18

In the early days of the Oyster Navy, Captain Hunter Davidson commanded a flotilla of twelve sloops and a steamer. With his single steamer Davidson was so ubiquitous that he kept the oyster pirates in a constant state

of anxiety. On one occasion a group of renegade "drudgers" planned to capture Davidson's steamer and murder its commander. When Davidson learned of the plot, he issued an invitation to the dredgers to a gun duel on the Bay. The oyster pirates declined. On another occasion Davidson foiled an ambush by resolutely turning on his attackers with deadly pistol fire. Taking several prisoners, he ferried them back to his boat in shackles. There were many courageous men like Davidson in the original Oyster Navy. The undaunted crew of the *Mary Compton*, for example, was feared by oyster pirates from Rock Hall to Smith Island. The *Mary Compton* contained an old muzzle-loading cannon that was capable of blowing a dredge right out of the water. 19

The 1880s were especially violent years for watermen on the Bay. During this time oyster prices skyrocketed and competition for the tasty bivalve grew particularly intense. Also, by 1884, the state legislature had lost interest in maintaining a strong oyster navy. As *Harper's Weekly* at that time reported, of the hundred men in the navy, "not more than a dozen were efficient." Following Hunter Davidson's resignation as commander of the flotilla, the Oyster Navy became a political sinecure for deserving hacks in the Maryland Democratic machine. These politicoes had little taste for gun fighting and many a captain of the Oyster Navy simply heaved to and went home when he was fired upon by an oyster pirate.

Fighting between dredgers and tongers soon became so fierce in Somerset County that in 1887 Governor Henry Lloyd appointed Jacob Wesley Webster of Deal's Island as Captain of the *Bessie Woolford* to police county waters. A veteran waterman, Webster had been arrested during the Civil War on charges of blockade running and was confined in prison in Salisbury for a time. Most of the dredgers of the lower Chesapeake knew Webster and respected him. While he commanded the *Bessie Woolford* the mouth of the Manokin River was free of oyster pirates.²¹

During this time there were also violent disputes between Maryland and Virginia oystermen. As Virginia did not enforce the federal law requiring its watermen to remain in their own territorial waters, many Virginia oystermen poached oysters in the Maryland beds. Also, the lack of a definitive boundary line between Maryland and Virginia that demarcated the line across the Bay to the Potomac River was a constant source of friction. Before the Civil War and the emergence of the oyster industry, a modern trans-Chesapeake boundary line was considered unnecessary. After 1870, however, with millions of dollars in oysters at stake, the boundary question became a burning issue.

The controversy between the two states dated back to 1668 when an agreement was entered into by Philip Calvert on the part of Maryland and Colonel Edmund Scarborough of Virginia. Under this compact Virginia received 15,000 more acres of territory than Maryland eventually thought she was entitled to. In 1785 the compact was renegotiated and representatives from the two states met with General George Washington at his house at Mount Vernon to iron out their difficulties. The primary issue this time centered on equal access of both states to the waters of the Potomac River. The new agreement allowed for reciprocal rights for Marylanders in the Pocomoke River on the

Eastern Shore as well. This agreement prevailed until the Civil War. By 1870, however, the Pocomoke Sound was one of the richest areas in the Bay in oysters and the focus of complicated litigation. Did Maryland watermen, on the basis of their rights to fish in the Pocomoke River, have the right to harvest oysters in the Virginia sections of the Pocomoke Sound? Maryland oystermen insisted that the entire Pocomoke Sound was a natural extension of the Pocomoke River and therefore Maryland was allowed access to the oyster beds; but Virginia vigorously disagreed and argued that Maryland did not have access to the entire Pocomoke Sound. The pact of 1785 referred only to the Pocomoke River and therefore Maryland was entitled to harvest oysters in that part of the Sound under its jurisdiction.

A second related issue affected the economic well-being of the port of Crisfield as well as the livelihoods of hundreds of Somerset County watermen. Where was the real boundary line across Chesapeake Bay? According to Maryland's calculations, the boundary line went from the low water mark of the southern shore of the Potomac from Smith's Point to the southern most angle of Watkins Point at the mouth of the Pocomoke River. Virginia hotly dissented. To have agreed to Maryland's interpretation of the boundary would have meant the surrender of Virginia's rights on Smith Island and about forty square miles of oyster grounds in Tangier Sound. On June 1, 1872, commissioners from the two states met at Crisfield to begin negotiating a satisfactory settlement of the boundary question. The Virginia commissioners led by General Henry A. Wise demanded a boundary line that, if established, would have given Virginia a large slice of the little Annemessex River, half of Crisfield, twenty miles of Tangier Sound, and a large part of Smith Island, Maryland responded with an equally outrageous demand. Throughout that summer, each state blustered and the boundary negotiations became stalemated. Finally in 1874 the oyster industry's demand for a well-demarcated boundary line prompted the two states to refer their dispute to federal arbitration.

After three years of complicated negotiations, a boundary line was finally determined. Under the Jenkins-Black Award of 1877 the boundary was demarcated as beginning at a point on the Potomac where the line between Virginia and West Virginia strikes the river at low watermark; thence to Smith's Point and across the Bay to Watkins Point on the Pocomoke. In terms of oyster beds, Virginia got the larger share of the Tangier and Pocomoke Sounds and Marylanders who ran over the "line of 77" to take oysters ran the risk of being captured by Virginia police and having their boats confiscated. Although Maryland retained sovereignty over the famous oyster beds in Tangier Sound known as Great Rocks, the Award of 1877 embittered large numbers of Maryland watermen. They had lost access to many of the oyster beds in Pocomoke Sound upon which their prosperity rested.

Also Somerset watermen complained that Virginia did nothing to prevent its dredge boats from crossing the line and stealing oysters in Maryland waters. Virginia boats, Isaac Lawson of Somerset complained, were depleting many of the beds reserved for local tongers. Just when the tongers had begun to have difficulties in keeping Maryland dredge boats out of their oyster beds,

the Virginians had also begun to steal their oysters. Finally, Lawson, L. T. Dryden and other citizens of Somerset County went to Annapolis on December 6, 1883, and demanded the intervention of the Oyster Navy, Inasmuch as the state refused to assist them out of reluctance to rekindle the old boundary dispute, Somerset's watermen decided to take the law into their own hands.²³ Throughout December, 1883, invading Virginia dredgers met a hail of bullets from outraged Maryland watermen and for the remainder of the season open warfare prevailed. To retaliate against the Virginia poachers, the watermen of Smith Island pirated ovsters in Virginia waters. When the Virginia ovster police schooner Tangier pursued the watermen back to Smith Island, it met a fierce reception. The schooner was fired upon from shore by twenty five Marylanders with repeating rifles. The Tangier returned the fire with a salvo from its howitzer. The Smith Islanders fired 500 rounds or more and threw up hasty breastworks to protect the island from invasion by the Virginia oyster police. Promising a fight to the finish, the Marylanders defied Captain A. J. Read to come ashore. Outnumbered and reluctant to storm the fortifications on the island, Read sailed the Tangier back to port at Onancock, Virginia.²⁴

As hostilities on the Bay escalated between the two states, Virginia increased its oyster police force. Late in 1883 the legislature appointed Captain George Hinman as "oyster inspector" and commander of the Virginia flotilla of four armed vessels and charged him with the task of keeping illegal dredgers out of Virginia's waters in the Pocomoke Sound. The Virginia legislature vowed swift punishment of illegal dredgers and passed a law that called for prison sentences of one to three years loss of vessel, with one half of the proceeds from the sale of the vessel going to the person making the capture of the oyster pirate. The Maryland legislature quickly responded by increasing appropriations for its oyster police and on August 26, 1891, appointed Joseph B. Seth commander of the newly reorganized Maryland Naval Militia. Seth, a major shareholder in the Eastern Shore Railroad with extensive business interests in Crisfield, enthusiastically took the force of 130 able bodied seamen in hand. Both oyster navies, however, chose to argue with one another rather than chase oyster pirates. In February, 1894, the fighting on the Annemessex River near Crisfield became so intense that the Governor of Maryland dispatched the armed steamer, Governor Thomas to the scene. The boat, after warning the illegal Virginia dredgers, fired several salvoes from its cannon and disabled several sloops.25

By the Spring of 1894 both Virginia and Maryland reluctantly admitted that the ongoing dispute over access to the Pocomoke Sound would have to be settled by another round of litigation. As two sovereign states were involved, the struggle for the oysters of the Pocomoke Sound would have to be settled by the United States Supreme Court. The litigation centered on the arrest of Robert L. Wharton, a Somerset waterman by John H. Wise, the Sheriff of Accomac County, Virginia, for taking oysters in that state's waters. As Wharton had refused to pay a heavy fine, he had been imprisoned in the county jail. The Supreme Court heard the case on April 23, 1894, and held that Maryland had no right to take oysters in Virginia's section of the Pocomoke Sound. The

Court's decision in Wharton v. Wise helped to end the oyster war between the two states and although conflicts would still arise between watermen of the two states, they would never again reach the level of hostility that prevailed on the Bay during the period 1883–1894.²⁶

Another factor bringing about a cessation of hostilities within the oyster industry was the steadily decreasing supply of available oysters that resulted from the overfishing of the oyster bars by dredge boats. As early as 1877, the Maryland General Assembly had become worried about the future supply of oysters in the Bay and commissioned a survey of Tangier Sound, the most productive oyster region in the Chesapeake. Throughout 1878 and 1879 Lieutenant Francis Winslow, a marine surveyor for the United States Navy, made a detailed analysis of Tangier Sound and found an average of only one oyster to each three square yards of beds. Such low yields confirmed Winslow's theory that the beds of the Tangier Sound were being rapidly exhausted.²⁷

Alarmed by Winslow's report, the Maryland legislature established a special Oyster Commission to investigate the Bay's oyster resources. The commission was chaired by Dr. William Brooks, an eminent biologist from Johns Hopkins University and Director of the Chesapeake Zoological laboratory. After a detailed examination of the oyster beds, Brooks and the Commission reached the same conclusion as Winslow. Both reports called attention to the fact that the oyster of the Chesapeake was not an endless resource. The lax enforcement of culling laws that prevented removal of young oysters as well as the failure to reseed the beds with oyster shells, they warned, would doom the industry unless reforms were made. Oysters were being taken out of the Bay at a rate far greater than they could be replenished by natural reproduction.²⁸

These reports, unfortunately, were disregarded by watermen who in 1884–1885 harvested a record fifteen million bushels of oysters from the Bay. Shortly thereafter, the annual Chesapeake oyster catch began its downward spiral. By 1900 the annual harvest had been reduced to 6.7 million bushels and would decrease every decade thereafter. In 1880 oysters had comprised 72.3 percent of the total fish catch in the Chesapeake; by 1965 they would amount to only 10 percent of the harvest.²⁹

The years after 1890 would be depressed ones for the oyster industry. To stay in business many dredges violated the culling laws. Many simply refused to license their vessels to avoid inspection by the oyster police. The regulation of the oyster industry on a county basis was a failure, the Oyster Commission reported, and state wide regulation was needed. During the years of declining oyster harvests, the Oyster Commission struggled to save the industry. Specifically it recommended against the burning of oyster shells for lime, or their use in the manufacture of iron or in road construction. The Commission also advocated tougher enforcement of the culling laws and an annual prohibition against taking oysters between April and October so that the beds might have an opportunity to replenish themselves. O As the depression lengthened, the state took action in 1906 with the passage of the Haman Act which provided for a complete survey of the state's oyster beds and a system for leasing submerged areas of the Bay for oyster production. The Haman Act precipi-

tated a scramble among watermen of the Eastern Shore for oyster leases. In Somerset County watermen squabbled over legal rights and cases involving oyster leases filled the docket of county court. Watermen, however, were generally uninterested in planting oysters on leased beds and soon turned against the leasing system because they feared that it would lead to a monopoly of the oyster beds by seafood packers and distributors. After 1915 the state discontinued this method of oyster conservation on the Chesapeake Bay. Ironically the Oyster Commission had more influence on oystermen in Connecticut and New York than in Maryland. After 1885 the practice of seeding oyster beds was widely observed in the Long Island Sound. Seasonal regulations and culling laws were also observed. At the time of the passage of the Haman Act, New York's watermen boasted that they already utilized "oyster farms" in the Long Island Sound to help regenerate their depressed industry.

The problem-ridden oyster industry did, however, precipitate one notable development. The 1890s witnessed the emergence of the skipjack, a new kind of sailing craft on the Chesapeake Bay. Like the bugeye, the skipjack was the product of changing economic conditions; it was simple of design, one-masted and V-bottomed as well as cheap to construct. Named after the bluefish that at times "skip" across the surface of the Chesapeake Bay, the skipjack was sufficiently easy to operate and one man could handle the boat in a pinch. By 1901 skipjacks had replaced the bugeve as ovster dredges on the Bay because they could be more economically operated and maintained. Thus declining oyster resources sealed the fate of all complicated and expensive sailing craft used in the business. Of the skipjacks built after 1890, the largest was the Robert L. Webster constructed by Sylvester Muir at Oriole. The boat was sixty feet on deck and was thirty-five gross tons in the water. Lacking the grace and fine lines of the bugeye, the skipjack was an easily navigable and plodding work boat that enabled watermen to harvest oysters with a minimum of expense. Its appearance on the Bay was testimony to the hard times that were taking both the art and the romance out of ovstering.32

The decline of the Chesapeake oyster industry after 1890 provided a tragic example of what occurs when natural resources are treated as common property. Oysters were harvested to a point where the reproduction capacity of the oyster beds was greatly diminished. As many beds were not reseeded with oyster shells, the remaining oysters were smothered by the encroaching silt. By 1920 a once profitable industry was so strained that few could earn much money from oystering. The resultant depression had a direct impact on the economy of Crisfield, the oyster capital of Maryland's Eastern Shore. After 1900 more packing houses closed annually than opened. Also the population of this once sprawling boom town declined as Crisfield's work force moved on in search of jobs. Many of the proud burlesque houses folded and the bootleggers and prostitutes that had helped make Crisfield one of the bawdiest towns on the Eastern Shore left and never returned. Experience had taught the important lesson that the Chesapeake was not an inexhaustible resource. From Annapolis to Crisfield, Maryland's watermen had participated for two decades in a seafood bonanza caused by an expanding national market and the result had been the near exhaustion of the Bay. After World War I it was clear to all who earned a livelihood from the Chesapeake that an age had passed. The Shellfish Commission, Oyster Police, and conservation experts would now impose order on the Bay and regulate the Chesapeake economy.

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BOOK REVIEWS

The Origin and Resolution of An Urban Crisis: Baltimore, 1890-1930. By Alan D. Anderson. (Baltimore: The Johns Hopkins University Press, 1977. Pp. xi, 143. \$12.00.)

Relatively little has been written on the history of the modern city of Baltimore. Ten years ago James Crooks published *Politics and Progress: The Rise of Urban Progressivism in Baltimore, 1895–1911* and although a few articles have appeared since that time, no full study of the period has been attempted. While Alan Anderson's book makes no pretense to be that study, if does offer a new and very explicitly conceptualized perspective on the city and its decision-makers. Municipal reform in the progressive era had long been treated by historians as political struggle between corrupt bosses and honest, democratic reformers. The manner of presentation has tended towards the narrative and even the anecdotal tradition. During the last decade, however, a number of new studies appeared giving more attention to economic factors and relying more heavily on analytical frameworks.

Anderson's book carries this trend to the opposite extreme since he hardly mentions political or social factors and his analytical models overwhelm the empirical data and narrative elements. Briefly, the central thesis is that Baltimore experienced a dual crisis during the last decades of the nineteenth century. Municipal services failed to keep pace with the growth of the city and the urban environment deteriorated. A sharp rise in central city land prices, the second aspect of the crisis, resulted from the failure to improve and extend the mass transit system. These "external diseconomies" became so serious a threat to the private economy of the city that business leaders finally overthrew the old inefficient municipal leaders, centralized and rationalized municipal services and, through the expenditure of vast sums of money, improved them to the point where business profits were no longer threatened. The land-value "crisis" was resolved in a different way. The private horsecar transit system was electrified, improved and centralized through private consolidation. In addition, the rapid adoption of the automobile combined with the improved mass transit to spread the city out, thus ending the land value crisis.

This approach to the history of Baltimore's reform era is a very useful counterpoint to Crooks' book; however, it exemplifies not only a similar narrowness of approach, but also the same imbalance between theory and empirical data. Crooks is excellent on data collection, but somewhat weak on analysis. Anderson's theories are quite fascinating, but the general research is superficial and the empirical evidence is fragmentary, inappropriate or in some cases non-existent. Those familiar with the complexities of Baltimore (or other large cities of this era) understand the grave difficulties in assembling relevant urban statistical data, mastering the legal and financial history of the city government and, when necessary, the state government. They know it is then necessary to consult other sources which usually provide many clues to the motivations of the relevant decision-makers. I think these historians will feel some forebodings when Mr. Anderson explains that the specific application of his models "requires some knowledge of the idiosyncrasies of the particular city under consideration, in this case Baltimore." I am afraid that in this case "some knowledge" is not sufficient. The author just doesn't know enough about Baltimore and the State of Maryland to verify his models or sometimes to formulate them properly.

To begin with, the assertion that the "urban environment" (a term not fully defined) was declining in the late 19th century is questionable. Pollution of the city's waterways and the harbour did increase during these years, but most other aspects of the city clearly improved. The water delivery system developed in the years 1870–1900 solved the city's water problems for the next thirty years and the work had been done

with great efficiency and economy. Few of the city streets had been paved with Belgian block or asphalt by 1900, but many had been repaved with cobble stone and were in better condition than they had been in 1870 (when many were not paved at all). The public schools, which the author says failed to keep up with population expansion (p. 23), were educating 43.2% of the school age children in 1900 compared to 28.1% in 1870. The charge that teachers were of lower quality by 1900 is simply impossible to prove; but no attempt is made at proof. Vernon Vavrina's doctoral dissertation contains a discussion of this issue, but apparently the author did not consult this work. The charge that the school physical plant fell farther behind population growth is easier to document, but no systematic data is provided. A detailed study of the topic by Andrea Andrews in this magazine in the fall of 1975 was apparently overlooked by the author.

The statement on page 69 that "Baltimore delayed the construction of a system of modern sanitary and storm sewers until after the turn of the century" is misleading. Sanitary sewers were not built but storm sewers were. In the 1880s and 1890s the city spent millions of dollars building enormous storm sewers which substantially improved the run-off problem. They still operate efficiently today. If the city had so deteriorated during the last decades of the 19th century that conditions had reached "crisis" proportions, one would expect to see substantial evidence in the pronouncements of city leaders and in the local press. No such evidence is presented. The fact of the matter is that the newspapers of the period, while recognizing some serious problems, agree that Baltimore had never before in living memory been such a fine place in which to live and work.

The root of the municipal services problem (crisis is too much of a modern journalistic term to fit the occasion, I think), is the failure of the city to keep municipal expenditures up with the population growth and, more importantly, I think, with the even more rapidly rising expectations. The author notices that real per capita expenditures fell during the 1870-1900 period (a very debatable statement, I think), and then rose dramatically thereafter during the reform period; therefore he concludes that the old bosses must have been unwilling to spend the necessary money or the voters were unwilling to trust them with it. Only after the reformers, with their new city charter and efficiency-centralization program come into power does the level of expenditure increase rapidly. This, it is surmised, must be due to their superior efficiency and honesty and their cost-benefit analysis of external diseconomies. There may be some truth to this hypothesis, but there is little direct evidence presented to support it. The real answer, I think, is to be found in the history of the city's assessed tax base. The two excellent Johns Hopkins studies on the financial history of Baltimore (covering the years up to 1926) clearly indicate that the city was terribly squeezed financially in the late 19th century by the failure of its tax base to keep up with population growth, but after 1900 the tax base increased dramatically. Between 1870 and 1900 population increased 90% while the tax base rose only 25%, but from 1900 to 1925 the population increased 50% and the tax base 400%. The whole issue of the city tax base is complex and, since it was determined by the state government, it was fought out in that arena, not in Baltimore. The author never mentions the Maryland legislature.

Finally, there is the question of the businessmen-reformers. Were they really so worried by the "external diseconomies" of population, congestion, poor schools, rough streets and rising land values that they banded together to reform the city government and spend millions of the taxpayers dollars to end these "crises"? There are no statistics on the profitability of Baltimore business or casual estimates by businessmen of how deeply the external diseconomies were cutting into those profits. What did the business leaders think about the issues? What did their local associations have to say?

Did they all agree on this? If not, who favored all (some?) of the reforms and who was against them? There is an excellent dissertation on the business leaders of the city during this period by Eleanor Bruchey and a wealth of material containing business views on the subject, but none of it is noted by the author. I think many business leaders remained more confused and the group as a whole more divided than the author knows or suggests. Taking as an example the sewerage crisis (the one urban problem that really did approach crisis proportions in Baltimore), there was no split between the old bosses and the reformers. Everyone agreed that a sanitary sewer system needed to be constructed. The problem was the type of system — a serious issue since the filtration systems were judged to be far more expensive than dilution systems. Both the businessmen and the professionals were divided on the cost-benefit question. The filtration system was ultimately chosen because that is what the Chesapeake Bay fishermen wanted and they were not concerned about the financial burden it placed on the city. The Maryland General Assembly finally passed the legislation compelling the city to build a system and prohibiting it from using the dilution method.

Space limitations prevent a discussion of the land value "crisis," but it is, I think, another case of data-starved hypotheses and oversimplified analysis. The final chapter, modestly entitled "The City As A System," is a series of sweeping generalizations about the entire development of American cities that will make many readers wince at such naive undimensional oversimplifications.

In conclusion, the chief value of this book is the heuristic set of questions which have not been asked before about Baltimore. It is unfortunate that the author made so little attempt to learn about the city. Both his answers and his questions suffer as a result.

University of Maryland Baltimore County Joseph L. Arnold

A History of Woodward, Baldwin and Company. By Mary Baldwin Baer and John Wilbur Baer (Baltimore: Garamond/Pridemark Press, 1977, Pp. vii, 72, \$8.00.)

The last 150 years have witnessed the growth and change in American marketing systems and organization. The textile industry, one of America's oldest, is an excellent example of this economic process. The history of the textile firm of Woodward, Baldwin and Company, although only a capsule of the total story, portrays quite clearly the various phases of the changing American markets and market systems after 1828.

The book differs from other textile histories because it emphasizes the history of the independent textile salesmen, the commission merchants or selling agents. Little is mentioned of the actual production of cotton fabrics or the people who produced them. Instead, it describes the evolution and change in the role of the commission merchants - a change from selling cotton and woolen goods to other wholesalers to building new cotton mills in the South. It explains the slow process of the merger of the commission houses with the textile mills to form the large industrial giants of today such as Stevens and other companies.

The book will be interesting to local historians because the firm originated in Baltimore in 1828 and even after expanding into the national and international markets, still maintained a branch in Baltimore until 1946. The local textile mills in Maryland at Savage, Warren, Franklinville and Phoenix were all at one time or another owned by the company. In addition, genealogists will be interested in the extensive study of a prominent Baltimore family.

A major weakness of family and business histories is the overemphasis on family genealogy and business organization at the expense of clarity. Too often the reader becomes confused by the chronological listing of changing partners and re-organizations of the business without reference to broader economic and social developments. The authors do make the reader aware, however, that survival in the highly competitive textile trade depended on constant changes in organization. The management of this firm must have been exceptional in their ability to adjust to changing economic conditions over such a long period of time.

The firm was founded in 1828 by the partnership of two young men, Talbot D. Jones and William Woodward, who sold cotton and woolen textiles. The company grew rapidly as a commission merchant for southern mills and eventually marketed and financed the sale of southern textiles throughout the United States, Canada, the Caribbean and China. Later the Baldwin family became associated with the Woodward family through marriage. The partnership remained within the Woodward-Baldwin families until 1947 when Abney Mills of South Carolina bought out the partnership but retained the name.

This study is not a social history and not a complete economic history. It must be considered instead a tale of a family business. If the background of changing American economic conditions had been portrayed more clearly, such as the opening of the southern frontier, the growth of the railroads, the rise in commercial brokerage houses, and the growth of the world cotton market, the reader would be able to form a clearer picture of the evolutionary development of the firm.

The book helps to explain the methods used by some more famous Baltimore merchant princes such as Johns Hopkins, Enoch Pratt and Robert Garrett to develop the networks for goods and capital which flowed through Baltimore during the nineteenth century. Its strength lies in its descriptions of methods employed by the company to find new customers and markets as the national and international frontiers expanded. To those interested in the story of successful marketing management this book would be of interest.

University of Baltimore

D. RANDALL BEIRNE

American Buildings and Their Architects: Technology and the Picturesque: The Corporate and the Early Gothic Styles. William H. Pierson, Jr. (Garden City: Doubleday & Co., 1978. 500 pp., 312 illus.)

This book is part of a series "devoted to an architectural analysis and evaluation of American buildings from colonial times to about 1960." It is not a book about technological aspects of architecture, as the subtitle might suggest. It is rather a consideration of cultural, functional and stylistic elements of the "picturesque" style, marked by asymmetry, copious ornamentation, irregular lines and rough materials, which came to dominate nineteenth century architecture.

The author first introduces a number of cultural factors which underlay the genesis of the picturesque style at the turn of the eighteenth century, notably cultural heterogeneity, romanticism, and technology. He then devotes the majority of the book to the Early Gothic picturesque style to the 1850s, as seen in churches, villas and houses, and in the works of architects such as Richard Upjohn, James Renwick and Alexander Jackson Downing.

Before turning to the Early Gothic, however, he devotes a chapter to the first three decades of mill architecture and mill housing in New England, from the 1790s to the 1830s. His approach to this area of growing scholarly interest is distinguished in its attempt to embrace two topics generally regarded as immiscible, the domestic picturesque style and the much more functional style of mills and mill housing. The approach

is based on the idea that the same culture produced the two styles during the same period of technological ascendancy. He suggests numerous cultural themes related to the picturesque — technology, rationalism, romanticism, regionalism, etc. — as being closely related to the shaping of mills and mill housing as well. He devotes the majority of the chapter to a handy summary of changing mill design from Samuel Slater's 1793 cotton mill in Pawtucket, Rhode Island — a true first in the United States — to the more massive mills of the 1830s. He refers to English inspirations, changing building materials, functional reasons for mill dimensions and fenestration, the development of towers and skylights, and other design sources and refinements. He also introduces the term "corporate style," coined by Theodore Sande (author of *Industrial Archaeology*), to refer to the large, extensive corporate-owned complexes of mills, workers' dormitories, churches, stores, schools, and other buildings which arose in the 1820s and '30s. (Sadly, no extant examples from that period can be found in Maryland.)

Why the picturesque style emerged, and what cultural factors contributed to it, are two engrossing questions which the author addresses. America in the early national period was a cauldron of cultural change. Much of this change can be read in the picturesque movement as Americans grasped for new, indigenous architectural forms to supplant colonial ones such as the Greek Revival. As the author sees it, the heterogeneity and explosive growth of the period provided the soil in which the picturesque style took root: "with increasing tempo, more aggressive and dynamic forms, consistent with emerging national attitudes, began to appear." Other forces buffeting the culture were equally responsible in the author's view: romanticism, with its focus on emotion and intuition rather than reason as the basis for understanding reality and experience; and technology. Although the author does not pursue the former, he implies the link between romanticism, with its rejection of rigidity and formality, and the picturesque, with its rejection of regularity and embracing of free-flowing, expressive forms.

What the author does pursue but does not fully establish is the influence of technology on the picturesque. Far beyond its application at the hands of factory owners and workers, technology and the act of embracing technology rapidly assumed importance as parts of America's cultural identity when technology penetrated all levels of thought and action. Aspirations, wants, customs, work life and the land itself became permeated by the omnipresence of technology. The author concentrates on mills and mill villages as the principal aesthetic outlet for this growing technological identity. He further relates technology to romanticism by referring to technology as combining "both the passion and the reason of the era" and thus producing an architecture representative, in his opinion, of the picturesque movement. He points to regional differences, "the wide gulf which separated Monticello and the Slater Mill," which resulted in technology's taking root in New England and dictating a special type of architecture. But because he does not adequately distinguish between style for style's sake (as in domestic architecture) and style determined by function (as in industrial architecture), and does not consider the influence of technology on the domestic picturesque, he does not clearly demonstrate that industrial and domestic architecture belonged in some way to the same movement, nor does he articulate their relationships within the movement. The links between cultural and functional influences on industrial architecture and cultural and functional influences on domestic architecture are not sufficiently addressed.

Despite its inconclusiveness and lack of focus, this book is a useful contribution to the study of nineteenth century architecture and culture. It provides the user with serviceable guides to mill and mill village types from the 1790s to the 1830s, and to domestic structures from the 1790s to the 1850s. It includes numerous functional and

stylistic aspects carefully identified, documented and illustrated. Much to the author's credit, he examines industrial and domestic architecture as two fingers of the same hand, and he tackles the long-neglected problem of the common cultural and technological forces which shaped them. The influence of technology and technological consciousness on the picturesque was complex and profound, and it will have to wait for future works before it can completely come to light. For those who can't wait, similar themes have been explored in Carroll Meeks' *The Railroad Station* (1956), in which he traces stylistic and functional influences on the design of passenger stations in the early, middle, and late stages of the picturesque movement, and Leo Marx's *The Machine in the Garden* (1965), a landmark work exploring the profound relationships of technology, romanticism and the wilderness.

Baltimore Industrial Museum

ROGER B. WHITE

Along the Color Line: Explorations in the Black Experience. By August Meier and Elliott Rudwick. Blacks in the New World series; August Meier, Series Editor. (Urbana, Ill.: University of Illinois Press, 1976. xvi, 404 pp. \$14.00.)

Along the Color Line is the latest book by two of the most productive and distinguished scholars of Afro-American history, August Meier and Elliott Rudwick. Focusing on black leadership and protest, this volume is an anthology of fourteen essays not published verbatim or nearly so in the authors' earlier books. Of the fourteen, three, constituting nearly half the book, are new, previously unpublished studies. Though not without flaws, including some dated ess and unevenness among the essays, this is an important work. Written over a span of a quarter-century, the essays mark the course of two major historians and illuminate major aspects of Afro-American history. The three pieces prepared specially for this collection, moreover, based on the authors' most recent research, make important new contributions to the study of twentieth-century civil rights activity.

The book is divided into three parts. Part I, "On Afro-American Leadership: From Frederick Douglass to Martin Luther King," comprises seven essays, including one on Frederick Douglass, one on W. E. B. DuBois, two on Booker T. Washington, and one on Martin Luther King. The remaining and most recent essays are two companion pieces examining the rise of black leadership in the NAACP from its founding to the mid-1930s. One, "Attorneys Black and White: A Case Study of Race Relations within the NAACP," appeared originally in the Journal of American History in March 1976 and (reprinted here with additional biographical information in the annotation) charts the change from the NAACP's early reliance on white lawyers to the assumption by the mid-1930s of control of the organization's legal work by black lawyers. The second essay, "The Rise of the Black Secretariat in the NAACP, 1909-35," is new and traces the shift in NAACP leadership from the Board to the secretariat and from whites to blacks. Together, these two important essays help understand the "transition from interracial leadership back to black leadership and control" that Meier and Rudwick find fundamental to civil rights activism since the founding of the interracial NAACP and Urban League early this century.

So also, though in different ways, does the new essay in Part II. This section of the book, "On Black Nationalism and Black Power," contains in addition to three previously published essays — on the emergence of Negro nationalism, on Booker T. Washington and the black town of Mound Bayou, Mississippi, and on black violence in the twentieth century — a new study entitled "Integration vs. Separatism: The NAACP and CORE Face Challenge from Within." Seeking to explain why the NAACP remained committed to its integrationist ideology during the black nationalist surge of

the 1960s while CORE moved rapidly to black separatism, Meier and Rudwick point persuasively to the different structures, leadership, and composition of the two organizations.

Part III of Along the Color Line, "On the History of Nonviolent Direct Action," contains the longest (nearly 100 pages) and most important of the new essays: "The Origins of Nonviolent Direct Action in Afro-American Protest: A Note on Historical Discontinuities." (Part III also includes two previously published articles, one on streetcar boycotts in the South from 1900 to 1916 and the other on the 1922-23 segregated school boycott in Springfield, Ohio.) Tracing nonviolent direct action from the antebellum period down to the 1960s, the new essay argues that despite its long history nonviolent direct action has not had a continuous and functional tradition among black Americans and has usually been a matter of strategy, not ideology. Nonviolent direct action, the authors contend, "has been episodic and marked by sharp discontinuities"; it has been continually "reinvented" as a practical response to circumstances and has been employed primarily when blacks were "experiencing critical changes in their status" - either serious decline or rising expectations. The essay provides significant new information on the history of nonviolent direct action before the 1960s, particularly on the large amount of direct action in the "watershed" 1930s. At times becoming essentially a detailed listing of protest action, however, the piece is not always so strong on explanation as on description — the decline noted in nonviolent direct action in the 1940s and early 1950s is not adequately explained or synthesized with other work, for example. Too, the arguments, including the central one of discontinuity and reinvention, are not always wholly convincing. But these reservations are not meant to obscure or detract from the real strengths of this major ground-breaking and revisionary essay.

In all, despite some shortcomings and unevenness, *Along the Color Line* is a substantial and important anthology. The three new pieces alone make it significant. Well-written, broadly researched, employing perspectives from other disciplines, and attentive to the impact of changing times and circumstances and different people and ideas, the essays in this volume tell us much about black leadership and protest and raise important new questions and arguments for research and debate.

University of Maryland Baltimore County

JOHN W JEFFRIES

Learning Vacations. By Gerson G. Eisenberg. (Washington, D.C.: Acropolis Books Ltd., 1978. Pp. XIV, 15-191. \$5.95 paper.)

As Americans become better educated and, though affluent, troubled by inflation, they are turning to vacations that will stretch both their minds and their dollars. Increasingly various institutions are responding to this desire by providing a remarkable kaleidoscope of "learning vacations," many of which are open to the whole family. Gerson G. Eisenberg, an afficianado of such educational experiences, has compiled an indispensable guide book to leisure activities. The programs available are listed under eight categories: college seminars; the great outdoors; travel; crafts and photography; museum and historical society trips; music, art, and folk festivals; writers' conferences; and conference centers. Within each category the programs are listed alphabetically by sponsoring institutions within each state and country. Each program is carefully described, telling its purpose, cost, living arrangements, and other pertinent data. There is in addition a geographical index, and institutional index, and a subject index. Anyone even contemplating such a wholesome combination of leisure and learning should make use of this, the second edition of a most helpful book.

Tulane University

News and Notices

1980 World Conference on Records

On the morning of August 12, 1980, amateur and professional genealogists, historians, demographers, and sociologists from around the world will be convened in the opening session of the 1980 World Conference on Records in Salt Lake City, Utah. The theme of this Conference will be "Preserving Our Heritage" with special emphasis being given to family history and genealogy.

A sequel to the highly successful World Conference held in 1969, the 1980 World Conference on Records is expected to attract more than 10,000 people.

During the four-day conference participants will be able to select from more than 400 seminars dealing with such topics as family history, genealogical research, demography, royalty, and heraldry. More than 200 international authorities will share their expertise in these fields. In addition, a general assembly will be held each morning at which time a guest speaker of international renown will address the conference.

Exhibits will also be constructed to project the theme of the conference. Such exhibits will contain artifacts and antiquities from around the world, including cultural and ethnic items of interest. Commercial exhibits will also be displayed.

Whether a novice or a professional genealogist, you will want to plan now to attend.

For additional information write: World Conference on Records

Genealogical Society of Utah 50 East North Temple Salt Lake City, UT 84150

Announcement

The Regional Economic History Research Center, Eleutherian Mills-Hagley Foundation will sponsor a conference on April 27, 1979 at 2:15 p.m.

Program:

Community Studies in the Mid-Atlantic

Chair and Comment: James A. Henretta, Boston University

Speakers:

Billy G. Smith, U.C.L.A. and R.E.H.R.C.

"Mobility in Eighteenth-Century Philadelphia"

Elizabeth E. Moyne, Johns Hopkins University and

R.E.H.R.C.

"Slave and Free: The Black Population of Kent County, Dela-

ware, 1790~1840"

Bernard Herman, University of Delaware

"Community and the Dynamics of Everyday Life"

For further information contact:

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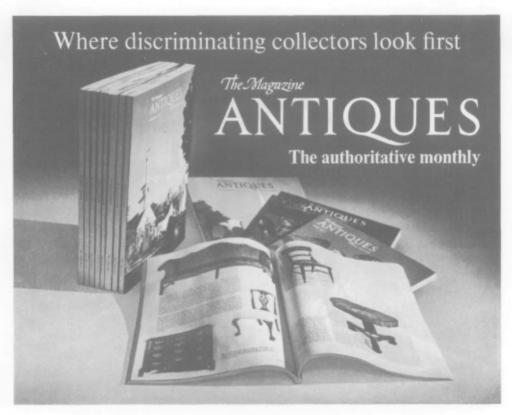
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